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THE BUILDER

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1903.

WE have just closed a year memorable for two important events at least; the great festival of the King's Coronation, and the successful termination of a war which was unavoidable, but which has cost not only many lives but much treasure, and has been a heavy tax on the resources of the country and on the pocket of the individual tax-payer. Such events belong essentially to the realm of politics, but they are not without their effect on the realm of art.

It has been usually the result of a successful war to give new impetus to architectural display in the conquering country, as was notably the case in Germany after the great war of 1870. But one can hardly expect the termination of our recent war, stubbornly contested and costly as it has proved, to have the same effect on the public mind and on the efflorescence of architectural ambition as was produced by Germany's sensational triumph over a great rival European Power. If, however, the event is not calculated to produce a new enthusiasm for art at home, it may have the effect of providing a new outlet for English architects abroad. There is no doubt that as soon as South Africa, or that part of it with which we are concerned, settles down into an ordered regular course of life, there will be a great deal of new building, and probably a considerable development of architectural taste, or at all events of the desire for it. And it is not improbable that a good deal of this will be done by English architects of the younger generation who will be tempted out to the new land by the new opportunities open to them there. And if this comes to pass, it is to be hoped that English architecture in South Africa may develop some new life and colour from the influences of a new climate and associations, and may show something better than that mere inferior and second-hand reproduction of English conventional types of imitative architecture which, with a very few exceptions, seems to be all that our modern building in India has been able to rise to.

Recurring to a phrase used a few lines back, is there anything we can hope for which will have the effect of producing a new enthusiasm for art at home? The past year has not given us any great reason for hoping for an improvement in this respect in the tone and temper of the average English mind in regard to art and architecture. We have a satisfactory note in Lord Curzon's address at Delhi the other day (referred to on another page); but on the other hand we have had the important governing body of London prepared to carry out a new bridge of the very worst description artistically (for we know that they were fully prepared to be satisfied with that first design until they found the outcry that it raised from artists), and resenting as an intrusion and an impertinence any suggestion that they ought to employ an artist to assist in the design. "Let the bridge go on, and let artists and architects take a back seat," was the characteristic exclamation of a member of the London County Council; a sentiment which exactly represents the general feeling of the English public about art; as Mr. Oldbuck says in "The Antiquary"—"There spoke all Fairport in one voice!" What is one to hope for English art with a public spirit such as this? One can hardly look to the leading artistic body, the Royal Academy, to enlighten the public mind; for though Lord Leighton, during his presidency, did his best towards rendering it in reality what it professes to be—an "Academy of Arts," under the present management it is becoming more and more a mere emporium for the exhibition and sale of popular pictures.

All we can hope for at present is the gradual effect of a better educated public opinion, which may in the end compel both Academies and County Councils to listen to its voice: but obviously the time is not yet.

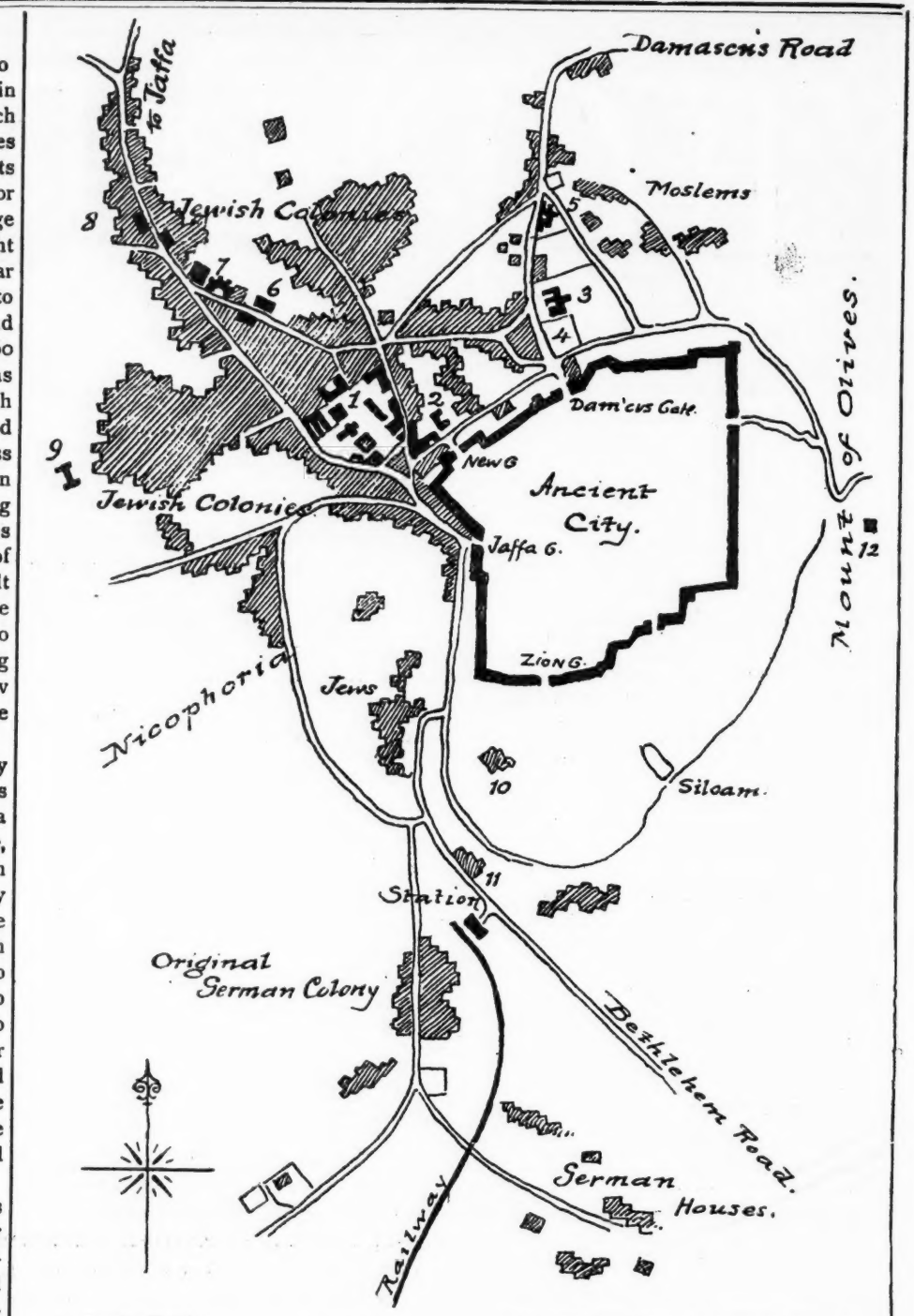
MODERN JERUSALEM.

JERUSALEM has been the focus o many religious enthusiasms in earlier ages—enthusiasms which usually took the form of crusades or revolutions amongst the fanatical sects of old-world Christianity, Judaism, or Mohammedanism. But the greatest change in the appearance of the city was brought about in modern times by the singular ambition to "restore" the Jewish race to what was considered their particular and appropriate home. Up till the year 1860 Jerusalem retained its Oriental character as a sleepy, old-fashioned capital of a Turkish Pashalic, and the open country extended from the city wall on every side—a treeless waste, with but scanty signs of human habitation. All this has been changed during the past forty years. On the western sides of the city immense straggling suburbs of squalid, one-storied houses have been built by the Mohammedan landowners to house the tens of thousands of pauper Jews who have been imported into the country during that period, and these suburbs still show increase, although the Jews are said to be decreasing in number.

For the present purpose it would hardly be necessary to mention the squalid slums which reach for a mile along the old Jaffa road and hem in the city on its western side, but for the fact that this immense Jewish immigration may possibly have incidentally influenced the building of some of the huge edifices belonging to Christian sects which now give such a remarkable appearance to the famous city. The Jews appear never to have been a building race — at least, no monuments of any importance have ever been identified with them—and it would consequently be useless to expect any trace of art in these modern squalid colonies, where even the synagogues are merely rented houses of the same form as the rest.

The Jewish immigration, although it has increased the population of the Holy City by more than half—perhaps three-quarters—seems likely to leave but few traces behind it. On the other hand, the Christian communities, representing but a very small part of the inhabitants, have spent immense sums in rearing a singular series of hospices, hospitals, schools, and convents, more especially during the last ten years. Of these buildings some owe their existence to the missionary attempt to convert Jews into Christians, such as the great Ratisbonne School, built by the Roman Catholics, and the church and hospital of the London Society for converting Jews.

Many if not all these modern public buildings, built with money subscribed in Europe, and the property of various religious and philanthropic societies, are really monuments of that rivalry and emulation natural to a mixed community of so many races and religions. The buildings which seem the most *used* are the schools and convents occupied by the teaching institutions. The hospital accommodation would appear to be somewhat in excess of present requirements, and the hospices are, of course, only intended for temporary use at the great pilgrimage season during the months of February—May. All these properties are occupied by foreigners, under the protection of their consuls and in accordance with treaties, many of which date back to the Middle Ages. The Turkish Government exercises hardly any control within the high walls which are usually built around them, and in most cases there are certain exemptions from taxation and other privileges which give a particular and unique character to these independent colonies representing all parts of the civilised world.

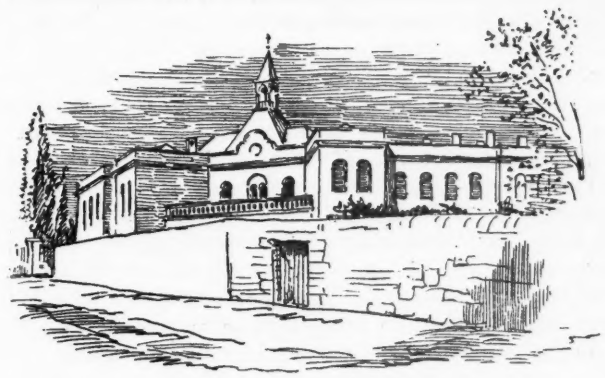


1.—Russian Hospice.
2.—French Hospice and Hospital of St. Louis.
3.—French Dominicans.
4.—German Benedictines.
5.—Anglican College.
6.—French and German Hospitals.
7.—English Jews' Society Hospital and Schools.
8.—Turkish and Jewish Hospitals.
9.—French Ratisbonne School for Jews.
10.—Church Missionary Schools.
11.—British Ophthalmic Hospital.
12.—Russian Church of Gethsemane.

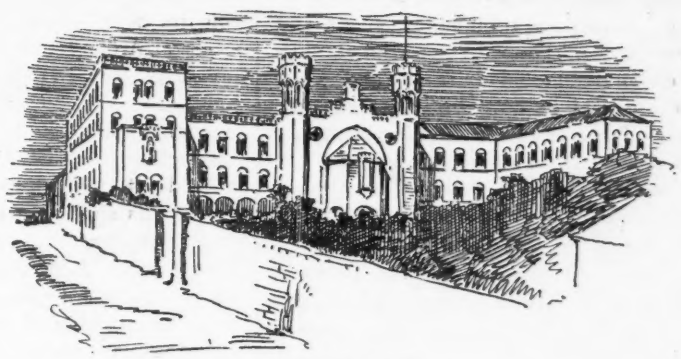
Plan of Modern Jerusalem.

Between 1850 and 1870 Jerusalem underwent that transformation from a simple old-world Oriental town—almost Mediæval in every characteristic, where genuine pilgrims bought scallop shells in its grimy, narrow bazaars, and were lodged in the crowded "khans" of the different religions—into that chaotic assemblage of different nationalities which we see at the present. During this early period of modern development the French and Russians initiated schemes for ameliorating the very deplorable conditions under which pilgrims from their respective countries were in the habit of visiting Jerusalem. The English and Germans combined together, about the same time, for the purpose of missionary enterprise, by founding the Anglo-German Bishopric. As solid and permanent results of this European movement, the Russians obtained a large tract of waste ground outside the city—the Meidan, or parade ground—on which they built the great Russian Hospice. The Roman Catholics obtained an equal portion of territory within the city, which is now covered by the Latin Patriarchal Palace, and schools and hospitals. The English were even earlier in the field (1845), but they seem to have been content with a very modest holding within the city upon which a small hospital, a few missionary residences, and a curious little church were built by the London Jews' Society.

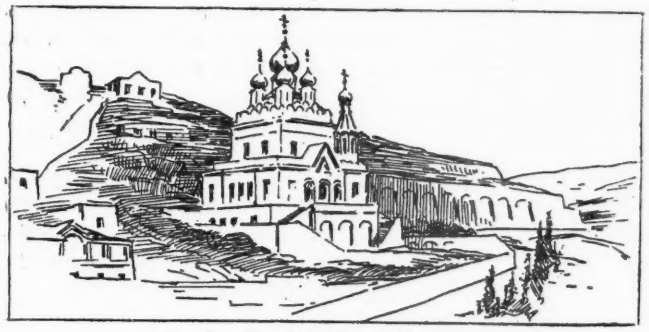
This church (described by Thackeray in his "Voyage from Cornhill to Grand Cairo") seems to have been considered also as the Cathedral of the evanescent institution of the Anglo-German Bishopric. It is an example of the deplorable "Perpendicular" of the period before Pugin, transplanted direct from England and carried out with all the



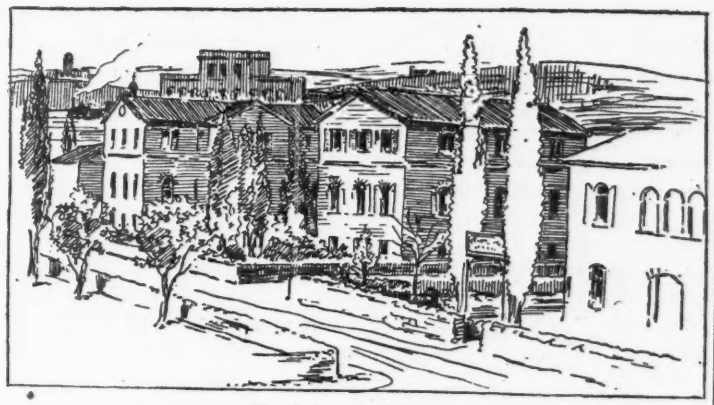
The New German Hospital.



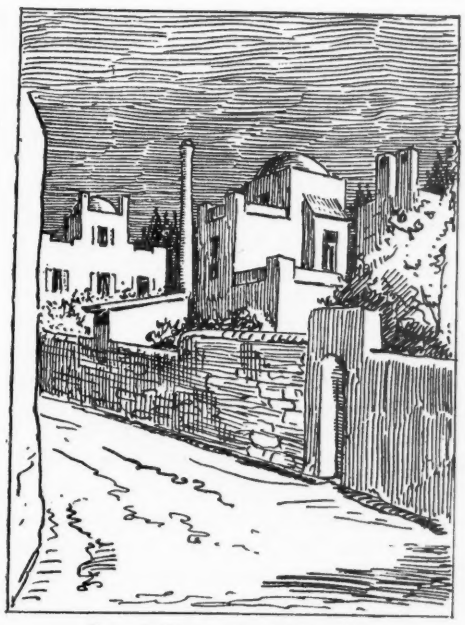
New French Hospice.



Russian Church; Valley of Jehosaphat.

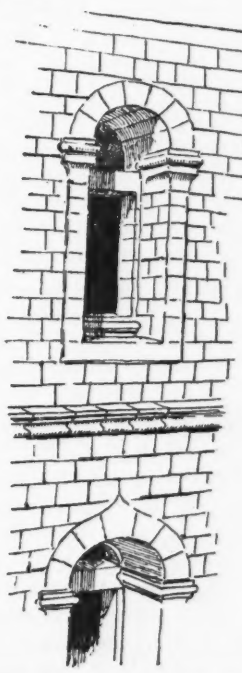


View in German Colony.

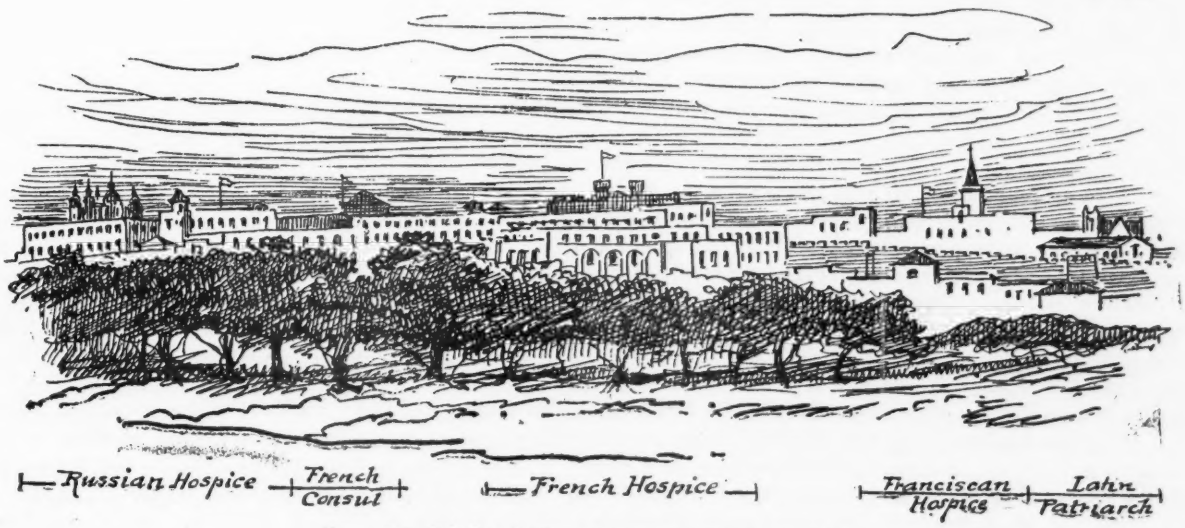


Doctor's House, English Hospital.

In the Russian Hospice.



Masonry Details, Schools of St. Vincent de Paul.



Some of the Principal Modern Buildings, as seen from Nicophoria.

Sketches of Modern Buildings in Jerusalem.

apparent wastefulness of material and labour which characterises buildings under such circumstances. The workmen who executed the elaborate moulded stone and woodwork are said to have been brought from Malta. The cost of the building must have been very great, as the foundations are said to have been carried down 40 ft. through the accumulated debris which almost everywhere forms the soil of modern Jerusalem The design for this church was furnished by an English architect named Hillyer, who died soon after the works were commenced in 1845. A clerk of works named Crutchlow seems to have carried it on, but certain errors in the application of architectural detail betray the absence of an educated architect. It is curious to notice, in some contemporary portions of the neighbouring Armenian Convent, "Perpendicular" doorways and windows, copied from the English building, which have a quaint effect amidst their Eastern surroundings. It is probable that Armenian workmen, who still retain a certain reputation as builders in this district, were also employed on the English Church.

The Latin Patriarchal Church and Palace, which are in the same quarter of the town as the English building, were probably erected shortly afterwards. The long list of subscribers engraved in marble slabs on the walls contain a majority of Belgian names —curiously reminiscent of the home of Godfrey de Bouillon. Unfortunately the architecture is more suggestive of early efforts to represent a "Gothic" castle on the stage than of any ancient ecclesiastical style. The church is, of course, on a very much larger scale, and in a more substantial style of construction than its English rival. But as an architectural design it is beneath criticism. It is of a cruciform plan, vaulted throughout; a triforium of the same dimensions as the aisle beneath was intended originally to accommodate the female part of the congregation, but is now disused. Details intended to be in the "Gothic" taste are crammed into every available space, and the whole mass of meaningless vulgarity is daubed over internally with painted decorations of saints and cherubs reclining on clouds, &c., of the poorest nineteenth century Italian style. The whole group of buildings, church and palace, constitute a remarkable example of that combination of tasteless fatuity and extravagance which was characteristic of the middle of the nineteenth century. The large "Gothic" windows with iron tracery are filled with landscape transparencies in coloured glass of the period. Close to this remarkable edifice is the Franciscan church of S. Salvador, occupying the site of an older church, this seeming to have been rebuilt about the same time, but in an inoffensive "Classic" style, which is quite pleasing by contrast.

To this earlier period belong the church and older portions of the great Russian Hospice. The Russian Palestine Society—a philanthropic institution founded about the time of the Crimean War for the purpose of regulating the immense pilgrimages which were then becoming a mania amongst the *moujiks*—erected a large church and several caravanserais upon the ancient "Meidan" which had been allotted to them outside the city wall. At that time it was still considered necessary to enclose such a property with a wall 12 ft. or 15 ft. high, and this wall, with its iron gates, still surrounds the hospice. Around this great Russian enclosure the modern suburbs of Jerusalem have gradually grown up. The early Russian buildings are almost devoid of any architectural detail, and all that can be said of the church is that it contrasts by its simplicity most favourably with the contemporary examples of English and French art. A certain picturesqueness always attaches to Russian buildings with their innumerable domes and spires of varied outlines and colours. In Jerusalem these characteristics assert themselves to the full, and these features, many of which have been added of recent years, give a thoroughly national air to the institution.

During the '70's and '80's a great deal of building was done in Jerusalem and on the Mount of Olives. The very remarkable Russian tower on the highest point of the latter, which forms a landmark for almost the whole of Palestine, rises to a height of about 150 ft. It is an uninteresting-looking object, ornamented with flat pilasters at the angles and divided into equal stages with large round arched openings. Close to its base is a pretty little Byzantine church (modern), with green painted domes. The immense Carmelite Convent close by was built about the same time; it is one of the

Entrance to a Jewish Colony.

few interesting modern buildings near Jerusalem; its cloister, which also forms an entrance-court, is a fairly good copy of the curious castle court at Kula'at el Hosyn, in North Syria. This convent is evidently the work of a clever French architect, and may have been designed by M. Mauss, who held the appointment of "Colonial Architect" for the French Government in the days of Napoleon III. M. Mauss superintended the very excellent restoration of the old crusading Church of St. Anne—the only instance of "restoration," in the modern sense in Jerusalem.

But the changes from an Empire to a Republic in France seem to have been disastrous for the architecture of Jerusalem. The official "colonial" architect no longer visits the Holy Land, and the huge modern buildings at present rising all over the French properties are abandoned to the irresponsible caprices of individuals, and the inevitable consequences of being built without the usual drawings, estimates, or any intelligent oversight or control. The often very curious results of such a system may be studied in the examples of the new French Hospice and the School of S. Vincent de Paul. Although the Hospice seems to have been intended to have a principal façade of a regular character, the two sides which were built at different periods have developed in a totally different manner.

Several reasons may be assigned for this unfortunate patchwork result in the modern buildings of Jerusalem. As a rule, the immense French establishments take years to complete, and during that time many changes take place in the *personnel* in charge of them. In many cases the guardians or temporary owners of the properties are females or native agents, who can hardly be expected to exercise much influence from a European standard in such matters. The money expended has been raised through loans and voluntary contributions, which, from their uncertain, intermittent nature, are always productive of an unsatisfactory patchwork result.

Almost any attempt to carry out a large building according to the routine of architectural practice in a civilised country is practically impossible in Turkey. In the first place, the native builders have very vague ideas about contracts, and, in fact, it is found better for the sake of all parties concerned to avoid anything which would only lead to complicated relations impossible of solution. European notions of financial credit and capital necessary for the completion of a contract are also quite unknown, and the employer has consequently to act as paymaster in detail. As a consequence, there is a complete absence of any exact standard of expenditure. Everything is done piecemeal, and is the source of endless bargaining. To these difficulties must be added the ever-present obstructiveness of the local government and other officials, whose only means of existence seems to be the extraction of "backshish" from the unhappy owners of property. The most absurd pleas are put forward for such purposes, after the buildings have been commenced and carried on to some extent. The local authorities then discover that certain clauses in the "firmans," or permits to build, have not been complied with, and it is decreed the work cannot be proceeded with. A band of ragged Turkish soldiers with rusty muskets sometimes appears on the scene to enforce such orders, and threaten imprisonment to the workmen. If matters of the kind are contested, a delay of months may result whilst they are passing through the circumlocution offices of an embassy in Constantinople. Delay and intrigue are, therefore, usually avoided by offering a prompt "backshish" to subordinate officials, whose objections are generally of the most puerile and ridiculous nature. In one recent case a church tower was stopped halfway up whilst the question was discussed as to whether the cross upon it would stand higher than the crescent on a neighbouring minaret. In another case, the ornamental battlements of a flat-roofed house were declared to be of a threatening character, although they only measured 2 ft. high from the inside gutter, with a thickness of 9 in. Such a terrible suggestiveness of fortification was considered sufficient to create a popular ferment, until the authorities concerned were induced to forget the matter by a conciliatory present.

There is, perhaps, one consolation in the mode of building in Turkey—the Society for the Protection of Ancient Buildings would at least think so—there is no such thing as "restoration." The Turk has not yet become sufficiently Europeanised to be able to comprehend any reason for the replacing or rebuilding of a monument. We

are, therefore, spared the distressing effect—as such it would be—of seeing the few surviving antiquities of the City "restored." With the exception of the church of St. Anne, already referred to, no attempt of the kind has ever been made, and in that particular case the ancient church fell into very good hands. The native builders have fortunately a strong dislike to using old materials. A lingering superstition about "Afreets" (ghosts) still influences them perhaps, and so the old buildings are not so much destroyed as might be expected. This, unfortunately, does not prevent the probable disappearance of the grand old city wall, which still seems to act as a protection to all that is of any historical interest within the city from the squalor and vulgarity of the western suburbs. Part of the wall is now quite buried amongst the buildings of the Latin community, and within a very few years little, if anything, will be visible of it between the Damascus and Jaffa Gates.*

In selecting a few of the modern buildings for our sketch illustrations the idea has been to draw attention to the very extraordinary element of what may almost be deemed a "new style," which seems to result from the peculiar conditions of Jerusalem. This "style"—if such it can be called—is as far removed from any European models as it is from the natural ancient Saracenic of the country. The Moslem builders are puzzled to provide houses for Europeans, whose habits remain entirely different from anything native, and who, at the same time, demand a certain ornamental display for their money. The natural result is an unintelligible jumble of all sorts of ideas. In fact, we may here study the consequences of ornamental building or architecture attempted without traditional forms, or the intervention of a professional architect. Only in a very few instances have European architects been employed, and their work has lost much of its European character through being entrusted to native clerks of works.

It is very regrettable that in what has been thus dignified with the name of a "new style" no traces remain of the somewhat original adaptation of the "rococo" forms which may be found still surviving in other parts of the Turkish Empire. In Syria and Asia Minor the old buildings are often decorated with fairly well executed imitations of scroll work, festoons, &c., of Louis XV. style, but used in an interesting way which reminds one of their non-European origin.

The method of building in Jerusalem tends to produce a coarse, clumsy style of workmanship and design. The walls are of immense thickness—sure sign of bad construction—and are constructed merely of large facing wedge-shaped stones filled inside with pebbles, small stones, and mud-mortar. This wretched construction seems to stand for a long time however, and is often carried to a height of 60 ft. Such walls have to be kept very carefully "pointed" with a strong cement made of lime and powdered potsherds, or with a kind of putty made with oil. The most singular thing is to find so extensive a use of iron joist construction for the floors; the joists merely resting on the edges of the stones which, in their turn, are often without any bed at all—mere "shiners," in fact. But for the extreme dryness of the climate and the care with which the winter rains are excluded, such buildings would be but short-lived. Even the arched construction to doors and windows is practically a sham. The stones are merely selected with two faces at right angles to follow the surface of the wall and the soffit of the arch, but no proper bedding of stones is ever thought of. Jerusalem is, in fact, a city of mud houses of the largest size, faced with stones which, from their size, give an impression of immense solidity and endurance. But, alas, appearances are deceptive, and these vast modern buildings are doomed to that fate which accounts for the 60 ft. high mounds of rubbish and debris constituting the levels of modern Jerusalem.

At the present day the buildings which attract most attention are the great French hospice of "Nôtre Dame de France," on the outside of the city wall near the New Gate, the immense convents of St. Etienne and of the "Reparatrici" in the same district, and the educational establishments of Ste. Anne (Cardinal Lavigerie's mission) and the schools of St. Vincent de Paul. These buildings are in process of being completed.

During the past few years the Russians have built, and are now completing, the magnificent church of the Garden of Gethsemane with its curious Asiatic ornamentation outside, terminating in wonderful gilded cupolas of the "onion" shape, on whose brilliant sides the landscape is reflected in an odd manner. The very remarkable Russian hospice adjoining the Holy Sepulchre Church in the centre of the city also deserves mention, not so much in the way of its architecture as for the singular manner in which the priceless fragments of Constantine's Basilica have been ingeniously preserved within the new building. Here, within a stone's throw, may be seen collected together some of the most extraordinary evidences of the successive phases in the history of Jerusalem. The buildings of the first Imperial patron of Christianity (it seems doubtful if Constantine was ever really a Christian), superimposed upon the fragments of a much earlier time, are easy to distinguish, whilst the succeeding ages of Moslem and Christian occupation of the spot are represented by the remains of a mosque and the well-preserved ruins of the Augustinian Priory of the neighbouring Church of the Holy Sepulchre. Altogether the Russian hospice in the centre of the city is quite the most interesting of all the modern buildings of Jerusalem from an archæological, if not from an architectural, point of view.

Almost adjoining the Russian hospice in the city is the new German Protestant church, the ostensible object of the German Emperor's visit to Palestine in 1897 for the purpose of consecration. This is a small building occupying the site of the ancient Crusading Church of S. Maria Maggiore, once the property of a female hospice connected with the Order of St. John. The intention of the architect—a certain Professor Adler, of Berlin—has been to "restore" the former building, the plan of which is to some extent preserved. The result is, however, anything but satisfactory; the exterior is covered with a vast quantity of very uninteresting modern Romanesque detail, and the only portion of the ancient structure really preserved—the remains of a sculptured round arch portal on the north side—has been patched together with modern insertions into a veritable botch. The most imposing part of the structure is the bell-tower, which is of crushing proportions in relation to so small a building. The whole seems intended as an assertion of German importance in the Holy Land, a fact which hardly needs such demonstration. The mention of this German monument naturally suggests some reference to the very remarkable colonisation of Palestine by Germans. These colonies at Jerusalem, Jaffa, and Haifa are the most prosperous and most civilising elements in the modern life of the country. There is nothing to be compared with them, and their influence upon the development of Jerusalem in particular is remarkable. But, unfortunately for architecture, the "Bauer" of Palestine cares for none of these things. He is content with his comfortable square house surrounded with pleasant, orderly gardens and neatly laid-out roads—a startling contrast to the native house, a combination of luxury and squalor with indescribably filthy surroundings. The German colonists are all of a peculiar sect called the "Temple," but it seems to be a religion for which a material temple is not requisite. It is supposed that about 500 of these Germans constitute the colony of Jerusalem; the principal shops and hotels of the town are in their hands, and their enterprise and industry have contributed almost as much to transform the ancient city as the presence of the great Jewish colonies already referred to. A view in the German colony might be thought to represent a village of the Fatherland, but the only important public building is the school-house, where the rising generation is educated and the general business of the community is transacted.

The English community of Jerusalem, consisting exclusively of missionaries and their dependants, is represented by three modern buildings of a monumental description, which belong to the three principal missionary societies of London. The small Church of St. Paul, with parsonage attached (C.M.S.), was built about 1880. It is evidently the work of local genius, probably designed by one of the German builders of the colony.

About 1892 the London Jews' Society determined to build a new hospital for their missionary purposes in the city, and commissioned Mr. Beresford Pite, of London, to visit the Holy Land and carry out their intention. This hospital is now finished, and appears to answer the purpose admirably. It is, of course, planned with due regard to modern ideas of isolation and sanitation on the pavilion principle. The pavilions, of one ward each, are arranged like the divisions of a fan connected together by a semicircular cloister, at one end of which is the house of the medical officer, at the other the dispensary, and in the middle the administration block. An agreeable garden occupies the space surrounded by the semicircular cloister, and divides the building from the road. Like all the public buildings of Levantine towns, the English hospital fails to attract the notice of visitors, however, on account of its unfortunate site. The original promoters of such buildings invariably select sites without any reference to what has to be built upon them, and as a consequence the unfortunate

* See the *Builder*, June 15, 1901, for article on this wall.

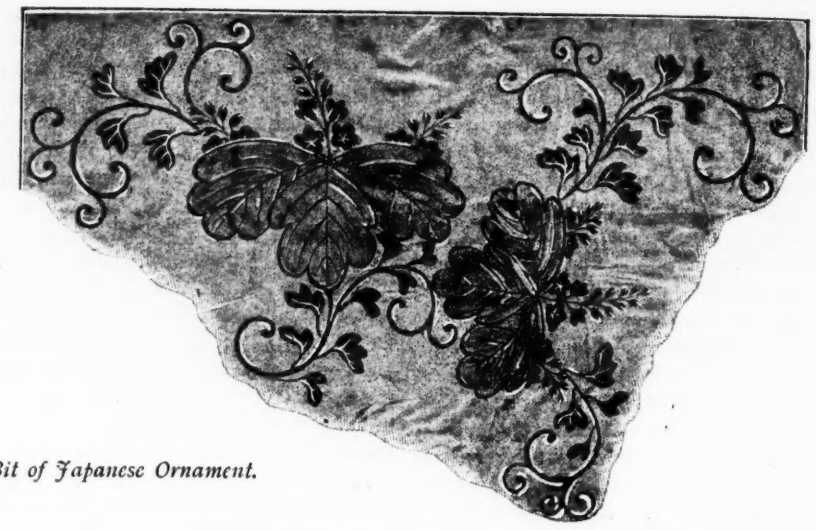
architect who is called in eventually to design something to fit the more or less suitable piece of ground is always handicapped. Mr. Pite may be congratulated on having produced a highly satisfactory hospital—which also from its simplicity of style harmonises with the surroundings of Jerusalem—although the site is an unfortunate one, and instead of having worthy surroundings is confronted on the opposite side of the road by a row of squalid backs of houses.

The only other important building erected with English money during late years worthy of mention is the Anglican College—situated in a very curious manner above the French property known in olden times as the Tombs of the Kings, a series of splendid rock-cut excavations on the Damascus high road to the north of the city. This collegiate institution (the property of a trust fund in London) was commenced in 1893 chiefly for the purpose of providing a residence for the Anglican Bishop in Jerusalem. It is still far from finished—it has been gradually erected with money subscribed from time to time in England. The buildings, designed by Mr. G. Jeffery, an English architect residing in Cyprus, surround a cloistered quad entered from the high road under a massive gate tower. Facing the gate is the chapel; on the south side of the quad is a large house for the bishop, and on the north is a building intended partly as a clergy house, and partly as a school. The quad is 100 ft. square; the chapel is 100 ft. long, about 33 ft. wide, and about 40 ft. high. The chapel is covered with a groined wood ceiling, and fitted internally with choir screen, font, &c., of Italian marble. The windows also, which are of elaborate tracery, were executed in Italy, it being almost impossible to get any masonry of sufficiently precise workmanship for such a purpose executed in Turkey. The marble of the windows harmonises well with the hard limestone of the walls, and indeed is hardly distinguishable from it. The group of buildings, although in a style of art which slightly recalls the latter forms of the French Gothic, is distinctly reminiscent of one of the large colleges of Oxford and Cambridge, and the clergy from those Universities for whose residence it is intended, doubtless experience a homely feeling within its walls. The site is a pleasant one, bounded on nearly all sides by high roads and with open spaces, which will secure the buildings from that crowding squalor and want of sanitation which seem inseparable from modern life in Jerusalem.

The development of modern Jerusalem still continues without abatement. The Jewish colonies may not appear very flourishing or much on the increase, but the Germans seem spreading over the Plain of Rephaim, to the south of the city, and with their advantages of wealth and superior intelligence they will before many years constitute an element in the population of the city equal, if not superior, to the great Jewish immigration of the nineteenth century. The opening up of the vast unknown hinterland of Jerusalem seems now within a measurable distance of realisation. The new railway on the other side of the Jordan will within a few months be open as far as the parallel of Jerusalem, and the connecting of it with the Jerusalem-Jaffa railway will follow as a matter of course. By this means Jerusalem will be placed in direct communication with Constantinople when the great German trunk system of Asia Minor, now open for traffic as far as Iconium, is joined on to the North Syrian line which now runs from Beyrout to Homs and Hamath through Baalbek.

The mineral and agricultural resources of the vast districts traversed by these railways invite extensive colonisation. Civilisation of earlier days withered before the advance of the Arab savages because it was not protected by the appliances nor supported by the liberal institutions of modern times. At the present day the Arab, with his insolence and ignorance and his racial prejudices against the foreigner, is doomed to disappear, and the German settlers of Palestine are probably paving the way for a very much greater colonisation than their most zealous leaders ever contemplated. Jerusalem may in course of time become the capital or centre to some extent of the southern extremity of this vast new-developing district. At the same time it would appear somewhat incoveniently situated for a commercial city; and so perhaps it is more probable that in spite of the influence which an old-established capital exerts in attracting a still larger population, the city of the Herods may eventually sink into the condition of some old cathedral town filled with religious and educational institutions, but sequestered from the busy haunts of men.

The last chapters in the history of this most famous of cities are perhaps as singular, and exhibit as curious traits of humanity at large, as any written in the earliest ages. The Jewish immigration, apparently without a scope, the objectless rivalry of the Christian sects, the unforeseen consequences of a small German colonisation, are as remarkable in their degree as the Crusades or the Biblical stories. An unfortunate fate hangs over Jerusalem—its history is the most interesting in the world, but of all its innumerable phases hardly a fragment remains in any monumental or artistic form. It seems a city doomed to perish perpetually, with every successive generation of its inhabitants. It remains to be seen if modern influences will have any effect in giving to the city monumental buildings of a more permanent character.



A Bit of Japanese Ornament.

NEW INFECTIOUS HOSPITAL, ACKTON.—The building of a new infectious hospital is about to be commenced at Ackton in the Urban District of Featherstone, for the accommodation of the districts of Castleford, Normanton, Featherstone, Whitwood, and Altofts. Mr. W. Hamilton Fearnley has been appointed architect for the work.

THE DECORATIVE ART OF THE JAPANESE.—I.

Lacquer Ornament.

IN a series of articles, of which this is the first, I propose to make further research into the great decorative art of the Japanese—the art by which they, as it were, introduced themselves to the world; for until a very few years ago, it was by this art alone that the Japanese were known and recognised by the multitude. Yet no attempt has yet been made to treat the art as a whole. Even in Japan itself the subject has so far been treated only in most rudimentary fashion. One reason for this is, probably, that the line between decorative and pictorial art, hard enough to trace in the West, is still more hard to determine in the East. Another reason no doubt lies in the complication and multiplicity of the subject; it seems impossible to get to the end of it, and all that can be attempted in these papers is to give a fairly comprehensive summary of it.

All the limitations—the faults, as many consider them—of Japanese pictorial art spring from the imperfect means which the artists have at their command. You could not do much with water-colours if you had to paint on blotting-paper; and the rapidly absorbent paper or prepared silk on which the Japanese paint their pictures is not very far removed from blotting-paper, and it is responsible for much of the peculiar qualities of their art—good as well as bad. The wonder is that they achieve so high a technique. I recommend anybody who is anxious to understand the initial difficulty of the Japanese artists to get a piece of their paper and try to lay on a wash. He will turn from his task a crosser but a wiser man. So, as I say, they know the difficulties—they understand how far they can go, and go no further. And so it is with everything they do, whether they work in silk, in metal, in painting on textile fabrics or porcelain, in enamels; whether they work with the hand or the loom, the brush or the chisel; they know how far off Nature any attempt to copy her must be, and they therefore fall back on conventional design. The process of lacquer working and ornamentation demands absolutely flat treatment, and, though gold is used of various tints and brightness, and colours also, very little, if any, gradation of tone is possible. The subjects, therefore, are rigidly conventional.

It is necessary to say, by way of paren-

thesis, that the treatment of landscape in flat gold masses is not in any way a departure from the general principles of their art. The means at the disposal of the landscape-painter on paper reduced much of their work to monochrome pictures with an easily definable scale of tones. In the simpler work there are very few—often as few as three or four. These subjects are therefore well adapted to gold work on lacquer, and produced a class of design which I may call, without disrespect, "conventional landscape." It is exceedingly interesting on account of the dexterity of workmanship, but it falls outside the scope of the present articles, which deal with purely conventional ornament.

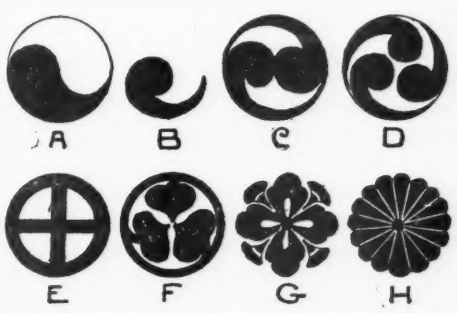
In the ornament of the Japanese there are two well-defined classes. Language is in its art department terribly poor, and writers are always being driven to invent terms, which, as often as not, till their meaning is grasped, seem an indirect survival from the first confusion of speech. But I think that the two expressions, "natural conventionalism" and "conventional naturalism," convey a definite meaning. By natural conventionalism will be understood the conventional treatment of natural forms; the term serves to mark designs which base their form on Nature, and to distinguish them from pure line ornament—"geometrical design" as it is sometimes called — arabesques, and all that is merely "line for line's sake." But in "conventional naturalism" the form is preserved to a great extent; it is only the treatment that is conventional. This is the main characteristic of Japanese decorative art: they delight in monochrome pictures of flowers as well as of landscape; in fact, unless they use body-colour they are almost driven to monochromatic treatment. And the transference of the medium from water-colour to lacquer, or to embroidery or metal work, is as easy to follow as in the case of landscape. Each person may have his preference for the one or other class, but I think that all will admit that both are legitimate.

The present series of articles will not differ from previous attempts to deal with the subject in the fact that they make no pretence to be exhaustive, but they deal with one branch of it at least that is practically new to study—the Classic ornament of the Buddhist Temples. Before treating of this, however, I propose to deal with some of the finest examples of Japanese work as it is generally understood—the work which comes from lacquer boxes and utensils. It is here especially that the contents of the treasure-house seem inexhaustible — yet even here it will be found that some classification is possible.

The first example (plate I, fig. 1, see lithographs) is a very free and informal treatment of sprays of peony, in gold and colour on the lid of a black lacquer box. The dark tone of the illustration represents the normal shade of gold which is used as a flat wash for the leaves: one of them (showing lighter in the illustration) is treated differently, in very dull gold with darker veining; it is intended for a faded leaf probably. The petals of the flowers are done in very bold gold outline; the veins are of finer gold lines drawn on the surface of the coloured lacquer, which is crimson for the larger flower and pale yellow for the smaller. This is a fine example of what I have called the conventional naturalistic treatment. The outline of the petals is really true to Nature. Except at one or two points, that is how you would draw a peony. The thick bold outlining is the first step in the conventionalising of the flower; and already there is the suggestion of the classical treatment of the acanthus leaf, which becomes more and more marked as the conventionalising process is developed. The peony appears again in the second illustration (fig. 2), which is in two shades of gold, without colour, on black. The conventional spirit has seized on the stalk and smaller leaves, and reduced them to their most rigid form. This form has become the classical model for a line-scroll ornament, which is very prevalent in Japan. In the third illustration (fig. 3) there is a narrow panel of chrysanthemums and butterflies, in which a very charming and original effect is produced by the simplest means. Three shades of gold are used—dull for the leaves, with brighter lines for the veins; and the petals of the flowers and the butterflies' wings are highly burnished.

In the remainder of the illustrations given on plate I there is a more formal art, in which deliberate limits are set to the play of fancy, yet wherein it will be seen that fancy still is free in spite of limit. The circle is used as the ground-plan of a great deal of Japanese design. The plum tree will be recognised in fig. 4, which is from the outside of a very precious gold lacquer box, the property of Captain Brinkley, R.A., of Tokyo, the inside of the lid being given in fig. 5. In fig. 6 the pine tree and a primitive water-plant are bent into conjoined circles, and in the tail-piece at the end of this article an *Iris Japonica* is also subjected to the circular treatment.

Designs in a circular form constitute, however, a special class, and must be dealt with separately. The circle, as I suppose many of my readers know, holds a charmed position in Eastern art. It stands for completion, and hence perfection; and everything that makes a perfect whole was expressed by a circle sub-divided in the manner shown at A. The male and female element, positive and negative, light and darkness, and generally things which are the complement of one another, are expressed by their complementary subdivisions of the circle. So it was



not unnatural that the "comma" figure—the *tomoyé* (B)—which is also symbolic (though the dispute as to what it is symbolic of is not yet settled, nor is likely to be, as there are at least six independent theories) should give rise to two circular figures, C and D, which are well known in Japanese design, known respectively as the *hitatsu-tomoyé* (the double comma), and *midsu-tomoyé* (the triple comma). The double comma, it is not unimportant to note, must not be confused with the symbol of completeness already given, for it is essentially different in its composition, and, moreover, the two commas do not make a complete whole. The symbol of completeness, it may be noted, is the crest of the kingdom of Corea. And so, in perfect sequence, according to the laws of natural development, the crests of the great nobles of Japan came, in many instances, to be based on the circle. E and F are two well-known examples. A third (G) is typical of many others; the last (H) is the floral emblem of the Imperial house.

So, too, the national sequence of things ordained that the circular form should become a means of decoration, and should be formally adopted by decorative art. It is so familiar now that its parentage is lost, and its origin almost ignored. For, like all other religious symbols which Japanese art delighted to seize on for its own purposes, it became invested with the grace of the national artistic idea; and its artistic adornment has embellished the traces of its birth out of existence.

The decoration of a circular surface, it is hardly necessary to point out, is peculiarly adapted to a tangential flow of subsidiary lines. But presently the decorated circles themselves became items of ornament, and were used, either singly or in combination with ornamentation of surfaces, which are often to be seen "*semée* of circles," to use a term of heraldry—*semée*, of course, with that peculiar and subtle grace of arrangement—that "most admired disorder"—which is the keynote of Japanese art. And when once these decorated circles came to be used in this way, it was natural that they should be subjected to the same treatment as other items of ornament — clouds, waves, leaves, flowers, petals—and come to be massed, or broken up, on what, for want of a better name, I may call the "broken-cloud" principle. The designs which are given in this number (plate ii.) are all taken from a very handsome black lacquer box (also the property of Captain Brinkley), that is to say, a pile of five square trays, with an ultimate lid: the whole being about 8 in. square, and standing about 15 in. high. These designs belong to the order which I have termed "conventional naturalism," the form both of flower and leaf being preserved, and their colours (in the original work) more or less adhered to in so far as the lacquer pigments allowed; but the treatment is flat, the wave of the petal is indicated by lines merely, and there is an absence of any attempt at modelling. The box is a very conservatory of flowers: there are the peony and plum blossoms of course, and a wealth of blossom besides—iris, lily, apple, dianthus, lychnis, hydrangea, "Cape gooseberry," coxcomb—and even the humble grasses are pressed into the artist's service. The colours in the original are as brilliant as Nature's own, and in addition there are sprinkled over the stalks and on the calyxes of the flowers tiny square flecks of gold.

Turning to the composition and to the circular disposal of the plants, it is hardly necessary with respect to it to use a higher term than ingenious, but ingenious it certainly is; for no plant so stiff or ugly in its habit, not even that floral monstrosity the "cox comb," but is made to conform to the circular law, and for its obedience is invested with a grace which is not its own.

The tangential flow of the inner lines of the designs next calls for our attention.

Tangential treatment follows inevitably from the use of a circle as the controlling outer line of the composition, and there are some plants—the iris, for example—which lend themselves specially to this arrangement. Except in the case of the plum branch, where the rugged natural growth is preserved, all the designs have this tangential quality in greater or less degree, according as the plant's habit permits; but it is especially noticeable in the little grass circle, which appears to me one of the most charming of all, with its extraordinary flow and play of lines, the art of them so hidden that they seem to be bending to the breezes in the meadow.

Finally, and chiefly of all, I would draw the reader's attention to these designs as first-rate examples of the cardinal principle of all decoration—the unequal and subtle distribution of masses and spaces, and the sense of completeness which it gives to the design, and consequent repose to the eye. In this respect both parts of fig. 3, the circle on the right of fig 4, and figs 8, 9, and 10, are specially noteworthy. F. T. P.

NOTES.

The National Trust.

THE seventh annual Report of the "National Trust for places of Historic Interest or Natural Beauty," states that during the last year the Trust has made by far its greatest acquisition of property, in the purchase of the Brandlehow estate on the banks of Derwentwater. This is about 108 acres in extent, and stretches from the shore of the lake up the hill to the public road bordering the unenclosed Common of Catbells, while its lake frontage extends about a mile from Otterbield Bay to the Brandlehow Lead Mines.

"A large area is thus made accessible to the public, both by land and from the lake, an area over which they may wander without restraint and enjoy unsurpassed views of typical lake scenery. Hitherto the shores of Derwentwater (like the shores of Killarney) have been open to the public only on sufferance, Henceforth there will be at least one spot which they will enjoy as of right."

The Eashing Bridges and approaches are now in the hands of the Trust, and during the winter repairs to the fabric have been carried out, under the supervision of Mr. Thackeray Turner, which while strengthening the bridges where required, have not damaged their beauty. A third acquisition, made during the past year, is that of the monument erected on the Dorset coast to the memory of Sir Thomas Hardy, Nelson's Flag-Captain. The tower has been handed over to the Trust on a 500 years' lease. Perhaps the most interesting matter mentioned in the Report is the proposal of the Trust to purchase Kymin Hill, near Monmouth, not only a place of remarkable beauty, but also the site of a curious little building erected in 1800, under the title of a "naval temple," in honour of the British Navy and the great English Admirals of the eighteenth century—Boscawen, Howe, Cornwallis, Jervis (spelt "Jarvis" in the Report, but this is surely incorrect), and Nelson. This is a kind of relic which certainly ought to be kept up, and its destruction is very likely to be the result of the site being sold into private hands. We hope the Trust will procure the funds required for this purchase.

Lord Curzon on Indian Art.

LORD CURZON'S speech on opening the exhibition of Indian art at Delhi is a gratifying one to read; it is so seldom that we find an English political ruler with any perception of or any care for art, that it really takes one quite by surprise to find a Viceroy of India showing such a clear perception of the qualities which formerly made Indian art so beautiful and valuable, and of the baneful effects of Oriental people being tempted to Europeanise their art-work. Unless this tendency is stemmed, it will be the ruin not only of Indian but perhaps also of Japanese art. It is to be hoped that Lord Curzon's words will not go unheeded by Indians and Anglo-Indians, since the requirements and tastes of the latter must have a great deal of influence on the former.

English *v.* American Railway Management.

THE correspondence upon this subject is still being carried on both in the daily Press and in trade journals. Many of the suggestions made by various contributors to the discussion, perhaps the majority of them, are simply impracticable, owing to the vastly different conditions prevailing in the two countries. "A Business Man," in the *Times* of December 25, advocates "freight agents," and shows how the American freight man "works up" a length of line with, say, twenty miles of country on either side. But the "country" in which his operations prove so successful has no counterpart here. Our freight agent—for we are not altogether without them—is powerless to "make" traffic as the American agent can in his extensive district. He certainly might be much more useful if empowered to give better facilities in the manner suggested by the *Times* correspondent; for when simply employed in snatching traffic from competitors, his efforts are of no value whatever to the community, and it is very questionable whether the shareholders reap any real benefit either. It is a case in which judicious combination would be advantageous and economical. Mr. Clement E. Stretton, in his recently published "History of the Midland Railway," deals at some length with the question of the construction and size of railway waggons. His verdict is that were we to adopt the American system, "the change would involve such gigantic alterations and so great sacrifice, that it could not possibly pay." And we suppose that in order to successfully advocate any railway reform, it is necessary to demonstrate clearly that it will pay!

Traction Engines.

No one can deny the importance of the traction engine industry to the country at large, and yet it is an unquestionable fact that Local Authorities have generally been anxious to prohibit the use of traction engines by means of harassing by-laws. Curiously enough, this suicidal policy is more particularly rampant in those very districts where road locomotion is of especial value to the inhabitants. A report of the Local Government Board for the year ending March 31, 1902, shows that the effect upon the traction engine industry of prohibitions and restrictions, demands careful investigation, and it appears that the inquiries made by that body have already resulted in many roads and bridges being thrown open to traction engines, in many improvements being effected, and in the expenditure of much money in bringing up the highways and bridges of the country to a better standard. The National Traction Engine Owners' and Users' Association is a body formed for the purpose of representing the interests of members at Local Government Board inquiries, of giving assistance in contesting claims for alleged damage to roads, and of advocating the advantages of an improved standard for highways generally. From the Report recently issued by the Association we gather that satisfactory progress is being made in the desired direction, and that considerable prejudice on the part of Local Authorities has been removed. Unfortunately it is the first instinct of a Local Council in this country to endeavour to suppress any new development whether it be good or bad, simply because it is new. In the present case, as mechanical transport on roads is necessary for the welfare of the people, it is clearly the duty of responsible authorities to do everything in their power for its encouragement.

More Niagara Power Plant.

IN addition to the 120,000-h.-p. power plant on the United States side of the Niagara Falls, a scheme is now in course of execution by the Canadian Niagara Power Company. As the site chosen is within the Victoria Free Park, it is necessary by the terms of the license granted by the Commissioners that all power developed must be transmitted beyond the boundaries for use. Power will be developed by turbines working in a wheelpit 480 ft. long by 21 ft. wide by 170 ft. deep, and a tail-race tunnel, 25 ft. high by 18 ft. wide, which has already been driven. In the present instalment of the plant provision will be made for the development of 50,000 h.-p., and it is anticipated that the installation will be ready for operation early in 1904. A second project on the Canadian side is that of the Ontario Power Company, the idea being to develop power in Victoria Park on a principle similar to that adopted by the Niagara Falls Power Company. The power station is to be situated a short distance below the Horseshoe Fall, where work has now been commenced. An interesting feature in connexion with this undertaking is the wing dam, built out for 800 ft. into the river, above Dufferin Islands. The effect of this dam has been to divert the water to such an extent that a large area of the river bed between the dam and the Horseshoe Falls is laid bare, and it is now possible to walk over the rocks whose curiously rounded forms show the influence of the waters that have passed over them for countless ages.

Tests of Concrete-Steel Floors.

SOME recent fire and load tests of concrete-steel floors for the Bureau of Buildings of Manhattan, New York, show very satisfactory results. In one type of floor construction tested, which we will call (*a*): the main supports were two 10-in. I beams spaced 5 ft. 6 in. apart; the steel reinforcement consisted of 1 in. by 1 in. tee-bars laid on the lower flanges of the beams; the bottom layer of concrete was 5½ in. thick, and in the proportion of 1 part Portland cement, 1 part sand, and 6 parts steam ashes; the upper bed of concrete was 6½ in. thick, and in the proportion of 1 part Portland cement and 15 parts steam ashes; the under surface was covered with 1 in. of "Acme" plaster. In the other form of construction (*b*) the framing was of 12-in. I beams spaced 6 ft. 1 in. apart; the steel reinforcement was of $\frac{9}{16}$-in. round rods 12 in. apart, with three transverse ½-in. rods; the bottom layer of concrete was 5½ in. thick, consisting of 1 part Portland cement, 2 parts sand, and 5 parts steam ashes; the top filling was 8 in. thick, consisting of 1 part Portland cement to 10 parts of cinders, the ceiling being covered with ½ in. of Rockwall plaster. The nature of the tests was briefly as follows:—To subject the floors to an average temperature of 1,700 deg. Fahr. for not less than four hours, under a distributed load of 150 lbs. per square foot, and to extinguish the fire by a water jet at 60 lbs. pressure per square inch. From the official Report, it appears that the plaster of floor (*a*) was practically intact, the concrete showing a considerable amount of coherence, and the beam protection being effective. The loading test was thoroughly satisfactory. As to floor (*b*), the Report says that the plaster was all destroyed, two steel rods were exposed by the action of water, but generally the floor remained in good condition. The loading test was perfectly satisfactory. Both types of floor construction were consequently recommended for use in the borough.

State Buildings in Egypt.

PRACTICALLY all the older public buildings in Egypt appear to be more or less defective in construction. Damp courses are usually absent, foundations consist of inferior material, the walls are not bonded, and have enormous joints of fat lime-mortar, and as a general rule the timbers used are too slight for the spans. In former times, when old flat roofs sagged, it was the practice to thicken up the roofing material for the purpose of filling hollows, and thus to prevent the accumulation of water and consequent leakage. It is not to be wondered at that many old roofs collapsed as a result of this treatment. In Alexandria almost all the roofs of old State buildings exhibit the following construction: top layer of lime, sand, and Kosremil 0·05 m. thick, concrete of lime, sand, and metal 0·35 m. thick, and occasionally a third layer of sea-weed 0·05 m. thick. The weight of this covering is very great, varying from 0.50 to 0.55 kilogrammes per square mètre, and cases have been known where the roof covering, acting on joists unsupported by wall plates, has caused differences of level amounting to fully 20 in. Again, the ends of joists are usually bricked up to exclude air, and so they rot away, not infrequently permitting roofs and floors to collapse. Some hundreds of buildings more or less exhibiting these undesirable features are scattered over Upper and Lower Egypt, most of them being beyond repair. All that can be attempted for the present is to patch them up until funds are available for complete reconstruction. Many new buildings are being erected by the Public Works Department, and in these armoured concrete, on the Monier and Hennebique systems, is being extensively employed with most satisfactory results, both as regards structural characteristics and expense.

"Chantrey House," Pimlico.

TWO or three of the houses which are being pulled down at the corner of Buckingham Palace-road (formerly Lower Belgrave-place) and Eccleston-street are associated with the memories of three eminent men. After his marriage in 1807, Sir Francis Chantrey removed from No. 12, Charles-street, St. James's-square, to No. 13 (since demolished) on the west side of Eccleston-street. Six years afterwards he bought Nos. 29-30, Lower Belgrave-place, converted them into one, and built there a foundry for his works in bronze, a studio, and a sculpture gallery. The ante-room of the gallery, lighted from above by a lantern, was designed for him by Sir John Soane in 1831. The house was renumbered No. 1, Eccleston-street — it has latterly been No. 102, Buckingham Palace-road — and Chantrey occupied it until his death in 1841. Some of his commissions were then completed by Professor Henry Weekes, R.A., who, as Chantrey's assistant, had tenanted an adjacent house (since No. 96, Buckingham Palace-road) and then took over the house and studio in .Eccleston-street, wherein he lived until his death in 1877. No. 27, Lower Belgrave-place (afterwards No. 98, Buckingham Palace-road) was from 1814 to 1842 the home of Allan Cunningham, the poet, whom Chantrey employed during twenty-seven years as his foreman and secretary, and befriended with an annuity of 100*l*. In that house was born (1816) his son Peter, a clerk in the Audit Office, who compiled for John Murray the "Handbook of London."

Society of Oil Painters.

THE exhibition of this Society at the Institute of Water Colours Gallery in Piccadilly is a numerous but not a very select one. It contains a good deal of mediocre work, and some that is positively vulgar—*e.g.*, "Perplexing" (29); "Safe Home Again" (152); "The Girl I left behind Me" (183), and some others; things that are of no use except to be engraved in a popular illustrated paper for the middle-class public, who think nothing of a picture unless it is anecdotic. Mr. J. R. Reid gives the same kind of title to his picture No. 195—"The Lass that Loves a Sailor"; but then the interest in this really lies in the artistic treatment; the title is merely a catalogue label. Mr. Kennington exhibits a large and clever but odd picture, "The Pedlar" (69), a woodland scene in some vague primeval age, where a man little clad in skins offers primitive trinkets to women even less clad; it is essentially a piece of clever figure painting. Among the beautiful works in the gallery is Mr. Melton Fisher's half-length of a girl seated reading (163), with a profusion of flowers in her lap; beautiful both in colour and for the delicate and poetic character of the head. "A Brunette" (259) is a charming head by the same artist, the Vice-President of the Society. The chief exhibit of the President, Mr. F. Walton, is a landscape (272) with much careful and delicate painting of foreground foliage, and a general completeness of composition and execution which make it a work of high artistic character. Among other figure subjects two by Mr. Gabriel Nicolet, "Le Rêve" (122) and "A Cup of Tea" (338), each showing a single figure in an interior, are noteworthy for a certain *spirituel* character in the figures, combined with very careful treatment of accessories. Mr. Byam Shaw, in "The Poet" (292), paints a curious but very effective idyll. Among the landscapes Mr. Cotman's "Meeting of Waters, Southampton" (279), has a pleasant touch of the old school of landscape about it, as if it had been painted a good many years ago, showing that rather conventional attention to compositions which is regarded as *passé*, but which had its merits. Among other works Mr. John White is excellent in "A Parish Council" of donkeys on a common (291); Mr. D. Y. Cameron's "Dark Angers" (200), the bridge light against the dark masses of the houses, is an effective architectural subject; Mr. Lavery sends an admirable sketch on a large scale under the title "The Bridge at Grès" (206), and Mr. Wetherbee a wild "Ebb-tide" scene (149) with a nude girl reclining among the rocks in the foreground; if not a sea-nymph (apparently she is a "human") she must have a very chilly time of it, but she furnishes the desired element in the composition. Mr. Henry Stock's "Dead Summer" (28) is not so successful, as an effort at imaginative symbolism, as some of his previous works of the same class.

Landscape Exhibition, Dudley Gallery.

THE exhibition of the small group of landscape-painters—Messrs. R. W. Allan, J. Aumonier, Mark Fisher, Peppercorn, Leslie Thomson, and Sir E. Waterlow—who exhibit collectively from time to time at the Dudley Gallery, is always a welcome event. The present is the eighth of the series. The principle which is at the bottom of their art is indicated by the quotation from Goethe on the fly-leaf of the catalogue—"The head cannot understand any work of art without the aid of the heart"; *i.e.*, this is not an exhibition of realistic landscape painting, but of landscape in which sentiment as well as execution is to be taken into consideration. First on the walls come ten works by Mr. Mark Fisher, painted in that broad and free manner which he has made his own; "The Sluice" is the largest work, but the two finest, we think, are "Shering Mill" and "Summer-time"; the latter we seem to have seen before, or perhaps it only contains the same elements of composition as a former work. Sir Ernest Waterlow's contributions are less broad in style but they are all fine in composition, and "October Evening, Picardy" is remarkably true to the character of the Picardy country, and shows also a most tender effect of light in the sky. Mr. Leslie Thomson's contributions are somewhat "loaded" in style, though fine in composition and feeling. Mr. Peppercorn, whose works occupy the top of the room, sometimes goes a little too far in the attempt to

reduce landscape to a kind of painted poem, but we do not find among the present set any which are open to this objection, and his large painting, "An Evening Effect," is a beautiful work; we like also the sombre composition entitled "A Cornish Valley." Mr. R. W. Allan shares the highest honours of the exhibition with Mr. Fisher; he sends eight works, nearly all fine. The largest one, "A Land of Hill and Glen," is perhaps the finest work in the room; "Early Spring in Kent," a long horizontal composition, is a beautiful little work, as also "Autumn," a sketch on a country road. Mr. Aumonier concludes with nine works, of which "Maldon, Early Morning," is a fine study of a special effect of morning light; "Cottages at Barrington," a view on one of the village greens which are among the special beauties of English rural scenery, is more in the artist's usual manner, and one of the best and most complete works in the collection. Altogether a charming little exhibition.

HYDE PARK CORNER; GREEN PARK; PICCADILLY; DOVER, ST. JAMES'S, AND OTHER STREETS; BERKELEY-SQUARE: 1801-1900.

IN the course of the nineteenth century two important changes were made in the west end of Piccadilly, with two others equally important in its east end, and at an interval of about fifty years in each of the two localities. In the latter quarter the late Metropolitan Board of Works mutilated a leading feature of Nash's design for the crossing with Regent-street; at the remoter end the Office of Works spoiled the architectural effect of the entrance into the town from the west as planned and designed by Decimus Burton, after the removal of the toll-house and its gates which are plotted in Salway's Survey—see p. 9 of our issue for January 4, 1902.

Hyde Park Corner, Constitution Hill, and the Wellington Arch.

Two pictures given in 1888 by Burton's niece, Miss E. J. Wood, to the national collection are respectively labelled: "Unknown—late eighteenth century (?)" and "By James Holland—b. 1800, d. 1870." Both are drawn from a spot a few yards westwards from the crossing to Grosvenor-place as one looks down the Tyburn valley in Piccadilly. The former view depicts the turnpike with its two toll-houses and gates, a middle group of five standards carrying eleven oil-lamps, some buildings by the walls of Hyde Park (1670) and Green Park (1666-7), Apsley House, of red brick, and in the foreground the east wing of St. George's Hospital (1733): the picture should be compared with Dagaty's coloured aquatint of 1797. I. Ware's own print shows the two wings he added to the north front of what had been Lord Lanesborough's "country house," its main front facing Hyde Park; Wilson's view in oils (1746) of the original building is preserved at the Foundling Hospital. The turnpike had been removed thither from Clarges-street in 1761, having been until 1721 at the end of Berkeley-street, and, as first erected across Hyde Park Corner (from the east corner of Grosvenor-place), consisted of a toll-house on the south side of the main road, three swing-gates and two turnstiles on the footpaths. Thirty years afterwards the toll-house was replaced—as we see in the picture—with two lodges in the roadway, two side-gates, and railings instead of the turnstiles—all designed by Henry Holland (*obiit* 1806). In 1825 an Act was passed for the abolition of certain tolls: on Tuesday, October 4, of that year were sold by auction the Hyde Park Gate with its "engine-house" and weighing machine, in twenty lots; a woodcut of the sale by Abbott will be found in Hone's "Everyday Book," Vol. I., cols. 1357-8; one lodge is inscribed "Piccadilly." The toll-gate was succeeded by a turnpike at Albert Gate, Knightsbridge, which remained there as late as 1856, *teste* a water-colour view of that year, by T. Hosmer Shepherd. James Holland painted his picture (lately removed to the Tate Gallery) for Decimus Burton (*obiit* 1881). He delineates a trophy of arms upon the blocking above the middle gateway of the Hyde Park screen, and introduces the sculptured podium of the Green Park arch, with ten sculptured figures of Britannia, &c., upon the entablature, and a quadriga, the horses to the north, which formed portions of Burton's original design. Since Holland's painting does not show the iron bullet-proof shutters that were affixed to Apsley House in 1831, but does show the hospital as rebuilt by W. Wilkins, R.A., in 1828-30, and Burton's screen and arch (1828), we may justly conclude that he drew his view during the interval 1828-31, and the costumes corroborate the inference.

Robert and James Adam had made a design in 1778 for an entrance into London at Hyde Park Corner. Sir John Soane prepared designs for two grand triumphal arches, with a colonnade and archways, to extend across the the main road. His scheme was set aside—several of his reserved projects have since been revived in substance—for Burton's screen of fluted Ionic columns with three carriage-ways and two footways (1828) on the site of the old Hyde Park gates. In the blocking of the middle gateway is a frieze by Henning. The iron gates, by Bramah, have gun-metal bearings. At the same time Burton erected at the top of Constitution Hill the arch modelled after the "Porta Aurea" at Pola [September 25, 1886*], and fitted with gates, also by Bramah. The King's Collection, British Museum, contains a copy of W. Kinnaird's proposed design, 1813, for a similar, but more highly ornamented, arch, carrying a quadriga. In 1840 Matthew Cotes Wyatt and his son James were commissioned to sculpture a figure of the Duke of Wellington mounted upon his charger "Copenhagen" (or, as some say, "Recovery"). The figure was modelled and cast out of captured cannon, in their studio and foundry at Dudley-grove House (opposite the east end of Bishop's-road bridge), Paddington, recently pulled down. The public subscribed about 30,000*l.* for the statue. In September, 1846, the statue was drawn, with a military escort, to Hyde Park Corner, and raised with crabs on to a base above a vaulting turned in brick at the top of the arch, whence on fine afternoons its shadow used to pass across the front of Apsley House.

With the growth of the town westwards, as well as to the north and south of Hyde Park and Kensington Gardens, the cross-traffic along Piccadilly and Park-lane and Grosvenor-place correspondingly increased. As a remedial measure, Hamilton-place was widened and its northern end opened into Park-lane, so as to divert the traffic from the lower and narrow end of the latter street. Various projects were advanced for dealing with the colliding lines of vehicles. Of those illustrated and described in the *Builder* may be cited the plans of the present Editor [April 22, 1882] for a road from opposite Park-lane, under Piccadilly and under Constitution Hill, into Grosvenor-place, without destroying the perspective of Piccadilly by a removal of the arch and a creation of a shapeless and inconvenient open space; James Fergusson [March 11, 1876], Mr. J. MacVicar Anderson [April 8, 1876], and Dr. Churchill [May 6, 1882], for a subway under Piccadilly, the last-named being similar to one advocated in the *Times* in 1901 by Sir J. Wolfe Barry. Then Mr. G. Shaw-Lefevre, First Commissioner of Works, unfolded in the House of Commons on March 28, 1883, his scheme for alterations of Hyde Park Corner at an estimated cost of 29,000*l.* Towards that amount the late Duke of Westminster offered to contribute 3,000*l.*, and the late Metropolitan Board of Works agreed to pay 20,000*l.* At that time Constitution Hill was entered, beneath the Wellington Arch, opposite the middle gateway of Burton's screen; thence it extended southwards to the corner of the wall of the grounds of Buckingham Palace, where it turned eastwards round the old reservoir site, passing to the south of the arch (new site), and so continued, as now, along the side of the wall of the Palace grounds. An official plan made by Sir John Taylor, dated September, 1882, shows that the general effect of the alteration has been to add to the roadway a triangular area measuring 610 ft. along Piccadilly, 560 ft. along Grosvenor-place, and (in a curve) 860 ft. from a point opposite Halkin-street to a point opposite Hamilton-place.* The Arch, situated with its north front in alignment with the north front of the Hospital, and at the north of the triangular "island" opposite the north wing of the Hospital, was removed 305 ft. to the south-east, and rebuilt out of parallel with its former position so that it stands askew in respect of every building around; as reconstructed it was opened by his Majesty (then Prince of Wales) on January 21, 1884. Adjustments of boundaries and of the incidence of costs delayed a settlement of the negotiations. In the result an Act was passed in 1887 to exempt the Metropolitan Board of Works from sharing in the expense, and it was arranged that although the railings of Green Park had formed a boundary of a part of St. Martin-in-the-Fields parish, the land taken away from the park should become portion of St. George, Hanover-square, parish, and that the Vestry of St. George should maintain and light the new roadways, the Vestry of St. Martin paying one-third of the cost. Meanwhile, in the bitterly cold and foggy day and night of January 24, 1883, amidst the fitful light of brazier fires, the statue had been lowered on to a level with the keystones of the arch, and thence to the ground within a hoarding which concealed it from public view. For taking it to pieces in May, we are enabled to say that the workmen firstly punched off the rivets that fastened the head, weighing, with the hat (4 ft. by 18 in. high), about 10 cwt., the plume—which, by the way, the Duke did not wear at Waterloo—being 3 ft. across, and of copper. A starling's nest was found in the hat. A workman hoisted up to the neck easily slipped through the collar, and, finding plenty of room for walking about inside, ascertained the positions of the bolts that rivetted the body of the rider and the head and tail of the horse. The other portions had been forged together at the foundry, the horse's legs being solid, and all other parts from ½ in. to 2½ in. in thickness. An illustration in the *Builder* of February 10, 1883, shows the arch on its original site, together with the plant for lowering the statue, which was conveyed to Aldershot, and there set up on a pedestal designed by Colonel R. W. Edis, the Government contributing 6 000*l.* towards the expenses of its transport. The late Sir J. E. Boehm's equestrian statue [March 2, 1889, with the four angle figures, separately], cast by Mr. Moore, of Ditton, and executed at a cost of 10,000*l.*, subscribed in part by private individuals, was unveiled by his present Majesty on December 21, 1888. The platform, pavement, &c., cost 5,000*l.*; Mr. Howard Ince helped Boehm in designing the pedestal; exception has been taken to the details of the costumes for the year 1815. In 1889 was closed the roadway through the arch that had been previously reserved for a few privileged persons; and in October light traffic was admitted into Constitution Hill by two roads, 14 ft. wide, made on either side of the arch.

Green Park.

The author of "Tancred," animadverting upon the monotony of nineteenth century architecture in London, points out how adverse has been the influence of our Parliamentary Government upon the fine arts. Lord Beaconsfield excepted, our statesmen cannot be credited with much regard for effort to enhance the beauty of the capital. We therefore recall the fact, not commonly known, that Sir Robert Peel, when First Lord of the Treasury in 1841, with a presage of the uses which Piccadilly has served as a processional road in our own time, proposed to make a noble terrace and public walk along the whole north side of the park, to be adorned with fountains, statues, balustrades, and so on, overlooking the slopes to the south. Until about twenty years years before, the Queen's-walk, made in 1720 along the east side for Queen Caroline, and the margin of the basin at the north-eastern corner had formed the resort after dinner, and in their dinner dress, of the most exclusive circles of the *beau monde*. Hence the large sums paid for Royal grants of bowed windows, balconies, and gardens for the houses on that side. At that time the park was entered through doors and gates in the walls, keys being given to favoured persons. A map in "Lockie's Guide," second edition, 1816, plots Penny's

* Dates within square brackets relate to illustrations in the *Builder*.

* The further, yet utterly futile, widening of Piccadilly begun on January 10, 1902, has straightened the curve in its line from the Arch, extended it to opposite Down-street, and taken from the Park a strip 35 ft. wide at its broadest part, at a cost of 13,000*l.*, Mr. Akers-Douglas being First Commissioner of Works.

gate at the south corner, with the Wilderness to the south and west of the Deputy Ranger's lodge. In the middle of the park stood the snow and ice house cited in "Ruggio's Diurnal," October 22, 1660; and in the hollow lay Cowford pool, through which ran the Tyburn stream. The Queen's Basin, a reservoir of the Chelsea Water Works, and enlarged in 1829 to a capacity of 1,500,000 gallons, is commonly, albeit erroneously, called Rosamond's Pond; the pond, so named correctly, in the north-western corner of St. James's Park had been filled up in 1770. In 1842 Lord Duncannon, First Commissioner of Works, drained and laid out Green Park; he razed the walls, filled up the reservoir and the pool, pulled down the Deputy Ranger's lodge (R. Adam, 1770) and the Hermitage (John Plaw, 1745—1820), opposite Down-street, and added the lodge grounds to the park, which now covers 53 acres. In his "Recollections, 1832—1886," Sir Algernon West says the two stags, modelled after prints by Bartolozzi, and now at Albert Gate, stood in front of Lady William Gordon's ice-house at the lodge. Her husband had succeeded Captain Thomas Shirley as Deputy-Ranger, and expended large sums upon that much-coveted residence. "It is a charming house," writes the Duke of Queensberry to George Selwyn; "how every one will hate you for having got it." Selwyn, with many others, was disappointed.

Sir Charles Barry's second set of designs for Bridgewater House were carried out in 1847-50: the house, erected for Francis, Lord Ellesmere, nephew and heir of the great founder of our inland navigation, stands on the site of Cleveland, formerly Berkshire, House, purchased and altered by the last Duke of Bridgewater (*obiit* 1803). "I am come from my home to your palace," said Queen Victoria on one occasion to the Duchess of Sutherland: the encomium is merited, for Stafford House has no compeer in London. It was begun for the Duke of York in 1825 from designs by Sir Robert Smirke, who, when the building had reached the ground floor, was superseded in favour of B. Dean Wyatt. Under the Acts 4 and 5 Vict., c. 27, and 5 Vict., c. 20, the Crown sold the mansion to George, first Duke of Sutherland, for an annual rent of 75*l.* and the cost (72,000*l.*) of the building, the latter amount being devoted to the laying out (by Pennethorne) of Victoria Park. Two years afterwards Barry remodelled the interior, added the masked top story, and built the stabling. For the site were demolished Godolphin House, the last home in London of C. J. Fox, and the Library, built by Kent (1737) for Queen Caroline, of which there is a sectional drawing in the King's Collection.

Piccadilly.

Apsley House.—In 1810 the Marquis of Wellesley acquired the residence which the brothers Adam had built of red brick after a plain design, for Henry, second Earl Bathurst (*obiit* 1794), who, on appointment as Lord Chancellor, had been elevated Baron Apsley, of Apsley, county Sussex. The site, granted by letters patent from the King of May 3, 1784, included that, adjoining the park gates, of the apple-stall of James Allen, the Dettingen veteran, upon whom George II. had bestowed, in 1750, the fee-simple of his lodging. Allen's successors sold their interest to Lord Bathurst for a considerable sum. The Marquis disposed of his house to his younger brother, Arthur, then living in Hamilton-place. The Duke, in 1828-9, employed Benjamin Dean Wyatt (*obiit* 1850) and his brother Phillip to alter the house by encasing it with Bath stone, converting the attic story, adding a suite of rooms with the "Waterloo" gallery over them on the west side, and building the tetra-style portico with pediment on the south front, at a cost, it is said, of 130,000*l.* The Duke, who on June 15, 1830, bought the Crown interest in the property for 9,530*l.*, would never call his home "Apsley House," nor use that name in his correspondence. The iron shutters which he affixed after an attack by a mob of "Reform" rioters in 1831, and of which he said "if any one be disposed to grow giddy with popular applause I think that a glance towards those iron shutters will soon sober him," were removed by his son.

In front of No. 142, and near the end of Hamilton-place (which has been rebuilt) stood the Hercules Pillars, commemorated in "The Plain Dealer" and "Tom Jones," where travellers were wont to alight on arriving in London, and in subsequent years a favourite resort of the Marquis of Granby and other military officers. Nos. 144-5 are by S. P. Cockerell (*obiit* 1827), the latter, Northampton House, and, we believe, inhabited by Cockerell, was bought in 1885 by Mr. Hamar Bass, M.P., for, we gather, 40,000*l.* No. 139, refronted and altered in 1890, occupies the site of No. 13, Piccadilly-terrace, Byron's last home in London before he quitted England in 1816. The adjoining house, No. 138, formed the eastern half of the residence of the notorious Duke of Queensberry (*obiit* 1810). At Gloucester House by the corner, west, of Park-lane, lived Thomas, seventh Earl of Elgin, who there deposited the Elgin marbles before their removal to the west wing of (old) Burlington House, and thence, in 1816, to the British Museum. The Duke of Gloucester purchased the house on his marriage (1816) with his cousin, the Princess Mary. Beyond Park-lane are some houses by Holland. No. 128, completed in November, 1892, for the Piccadilly Club, replaces the Running Horse. No. 116, formerly Hope House, was built in 1848-49 by W. Cubitt & Co., after Professor Donaldson's designs, for H. T. Hope, who removed thither the earlier collection of pictures formed by "Anastasius" Hope (*obiit* 1831) at his house in Duchess-street, Portland-place. No. 116 (the decorations excepted) cost 30,000*l.*, the two fronts being of Caen stone with marble panels; the iron railings by André, of Paris; and the decoration, carving, the balustrade, and vases, &c., by Dussillion and a staff of French artists. It is now occupied by the Junior Athenæum Club, who in 1887 had bought the site of the three adjoining houses on the east side of Down-street [March 24, 1888, plan]. No. 106, St. James's Club, on the site of the Greyhound, had been Coventry House, bought by Lord Coventry in 1764 from Sir Hugh Hunlock for 10,000 guineas, and afterwards the Ambassadors' Club, since dissolved. No. 105, on the Stratton estate, the residence of another celebrated collector of works of art, including furniture and musical instruments, the late Sir Julian Goldsmid, Bart., marks the site of Carter's, one of the many statuary yards formerly in Piccadilly. The ground had been taken for a house designed by Novosielski, a Polish architect, for the last Earl of Barrymore, who died (1824) before its completion; the house was opened as the Pulteney Hotel, where the Emperor of Russia and his sister the Grand Duchess of Oldenberg stayed during the visit of the allied Sovereigns to England in 1814. The house was rebuilt in 1850-1 from the ground floor, the Portland stones being used again, by Sir Robert Smirke (*obiit* 1867) for the Marquis of Hertford, who, however, never inhabited it, and devised it to the late Sir Richard Wallace, the ground-rent being (in 1896) 1,600*l.* per annum. The Goldsmid collection was dispersed at Christie's in June, 1896; the Isthmian Club removed in November, 1897, to No. 105 from Walsingham House on the south side of the road. Next east, on the site of No. 104, stood the leaden figure foundry of John Van Nost who came to England with William III., described in Baldwin's "New Complete Guide for 1754-5" as being "near to the Queen's Mead House in Hyde Park-road." Nos. 101-4 were demolished for the Junior Constitutional Club [January 3, 1891]; the fabric cost about 75,000*l.*, the general contractors being Messrs. Bywater & Co.; the architect, Colonel R. W. Edis, adopted White Norwegian marble from Ofoten Fjord, with Portland stone for the moulded work, for the façade, which is one of the earliest examples of the use to any large extent of marble as ashlar facing for a London building; the members migrated in December, 1892, from No. 14, Regent-street, the (old) Gallery of Illustration, by Nash. At the rebuilding an opportunity was lost of raising the level of the road and so diminishing the gradient-rates of the inclines due to the course of the Tyburn stream which crossed the main road at the ancient Cowford in the hollow, since known as Stonebridge Close (*vide* Green Park). No. 100 is the Badminton Club, 1884-5, by Colonel Edis. At the corner (west) of Whitehorse-street stood the house, No. 96, of Charles Dumergue with whom Sir Walter Scott frequently stayed when he visited London. The site of Nos. 96-7 has been taken for the premises built of Ham Hill coloured stone after Messrs. T. & F. T. Verity's designs [January 17, 1891; and October 15, 1892, present design] for Sir Henry Brownrigg, Bart., first occupied by the Green Park (Ladies') Club; next, until 1898, by the New Travellers' Club; and now by the Junior Naval and Military Club. Since Lord Palmerston's death in 1865, the Naval and Military Club have tenanted No. 94, Cambridge (formerly Cholmondeley) House, erected for Lord Egremont, and the residence of Adolphus, Duke of Cambridge, who died in 1850; and then, 1850-1865, of Lord Palmerston. The Imperial Service Club, No. 84, with a return frontage to Clarges-street, as rebuilt in 1899, is by Mr. George Sherrin. Bath House, one of the most elegantly fitted in the town, was built on the site of the residence of William Pulteney, Earl of Bath, for Alexander Baring, elevated Baron Ashburton in 1835, and contained a famous collection of sculpture and pictures, including Dutch and Flemish paintings from Talleyrand's Gallery. At the opposite corner of Bolton-street stood Wattier's—a "subscription house" frequented by Beau Brummel and his associates in the days of the Regency. The Berkeley Hotel, covering the site of the Three Kings, No. 75, has absorbed the St. James's Hotel, and in 1896-7 was enlarged, after Mr. R. Griggs's designs, on the sites of Nos. 74, formerly a shop of John Camden Hotten, bookseller, and 73. In his "Vestiges of London," 1851, J. W. Archer gives an etching of the then remains of Clarendon House, consisting of two Corinthian pilasters by the entrance into the galleried stable-yard of the Three Kings, whence General Palmer started the first Bath mail-coach.

At the corner (east) of Dover-street is a block built, 1884, in red brick and Ancaster stone at a cost exceeding 102,000*l.* including 70,000*l.* for the freehold site of 4,550 ft., after Messrs. W. S. Weatherley and F. E. Jones's plans and designs [November 28, 1885, with two plans] for Hatchett's Hotel and the New White Horse Cellars, and sold at auction on January 26, 1887, for 65,000*l.* Having been occupied during a brief period by a restaurant club, the Cercle de Luxe, it was bought for 127,000*l.* in August, 1897, and reopened as the Hatchett's Restaurant and the Avondale Hotel. Some relics are preserved there of Abraham Hatchett's hostelry, the headquarters of mail-coaches which travelled into the West of England: confer J. Rosenberg's coloured print, after J. Pollard, of 1828. The Burlington Arcade, by Samuel Ware, and opened on March 20, 1819, was built upon the Duke of Devonshire's land to screen Burlington House and its gardens from the houses along the east side of Old Bond-street; the original leases yielded 4,000*l.* per annum from seventy-two shops. The Duke's project to erect a similar screen along the east side of his property was thwarted by the tenants in the Albany.

Burlington House.—Lord George Henry Cavendish, a son of the fourth Duke of Devonshire by his wife Charlotte, Baroness Clifford, daughter and heir of Richard, Earl of Burlington and Cork, inherited a large fortune from his kinsman, the eminent natural philosopher, as well as the Burlington estates, and in 1831 was created Earl of Burlington. In or about 1820 he had secured a renewal of Burlington House of which the demolition had been contemplated, and in the words of Sir W. Chambers saved "one of the finest pieces of architecture in Europe." He employed Samuel Ware, architect to the Duke of Devonshire and surveyor to the Duke of Portland, to rebuild the north front of the house, convert the attic second floor, construct a new roof, make a new grand staircase, and execute extensive internal repairs and decorations at an outlay of 50,000*l.* The Government bought the house and grounds extending to Burlington-gardens, and covering 145,000 ft. superficial, for, it appears, 140,000*l.* in 1854, and assigned rooms there to the University of London, the Royal Society, and the Linnean and Chemical Societies. For the south range of new buildings with two wings [March 25, 1871], by R. R. Banks (*obiit* 1872) and his partner, Charles Barry (*obiit* 1890), were demolished in August, 1867, a house, then numbered "48," and Colin Campbell's screen-wall of brick with stone piers, and great stone gate—confer his "Vitruvius Britannicus," Vol. III.—together with the wing-buildings and the beautiful quadrantal colonnade within [October 28, 1854, the gate, courtyard, and house]; see also A. Pugin's drawing and plan, 1823, "Edifices of London." The colonnade, ascribed variously to Richard, Lord Burlington, Kent, Gibbs, and Leoni, had been modelled after Palladio's palace of Count Vierical at

Vicenza; its stones were wantonly thrown on the riverside at Battersea Park. The foundations were begun in November, 1868, and Mansfield and Price tendered 128,803*l.* for the superstructure. Rooms in the new buildings have been assigned to the Royal Society, the Antiquaries, the Royal Astronomical, Geological, Chemical, Linnean, and other learned societies, as shown in our plan of March 25, 1871. In 1867-70 Sydney Smirke (*obiit* 1877) remodelled and enlarged with an additional story old Burlington House, and built immediately behind it the block containing the exhibition galleries, lecture theatre, &c., that are familiar to most of our readers [February 6, 1869, plans of two floors], for the Royal Academy of Arts, who vacated their rooms in Trafalgar-square in 1869, the general contractors being Messrs. Jackson & Shaw, and the decorations by Leonard Collmann. The late Mr. W. E. Gladstone stated in the House of Commons (May 24, 1894) that the trustees hold the premises for a term of 999 years from 1886 at 1*l.* per annum under a guarantee given by the Chancellor of the Exchequer in 1835. In 1899-1900 Mr. T. G. Jackson, R.A., altered and redecorated the vestibule and base of the main staircase, employing for the columns and pilasters a grey-toned cipollino marble from Emboea, not before used in this country, repaving the floor, and inserting in the ceiling some circular panels which Angelica Kauffmann painted, 1780, for the lecture-room in the Academy's rooms at Somerset House and which had been fixed in the ceiling of the library at Trafalgar-square in 1838. The keeper's rooms also were altered and redecorated; the library formed the ballroom of Lord Burlington's time, and the Council-room, having richly carved mahogany doors and a painted ceiling, remains as it was in his day.

University of London.—At the rear, and facing Burlington-gardens, are the buildings erected in 1868-70 by Messrs. Jackson & Shaw, after Sir James Pennethorne's plans and designs for the University of London [November 23, 1867, view and plan]. The original estimate of 65,000*l.* was exceeded on a change in the design as the work proceeded. The front is constructed of Portland and red Mansfield stone intermixed, with an enriched course of Hopton Wood. The arrangement, at its two ends, of the columnar order of the middle first floor arcade is noteworthy, as the architect, instead of placing an ordinary half-column in the angle with the tower, completes the arcade with a full column (at each end), whilst the pilasters at the tower-angles supply the requisite finish to the order, so that the latter is disposed in the manner of a temple *in antis*.

The Albany.—In 1770 Stephen Fox, second Lord Holland, sold to Viscount Melbourne the mansion then known as Piccadilly, and since as Melbourne, House, designed by Sir William Chambers [January 4, 1902, screen with entrance gates]. Lord Melbourne exchanged his house to Frederick Duke of York and Albany for Melbourne, now Dover, House, Whitehall. In 1804 Henry Holland converted the house, now known as "A," for sets of chambers, and added those at the rear—some of them are freehold. The courtyard and buildings occupy the sites of houses of Lord Sunderland (*temp.* James II.), Sir Thomas Clarges, and Lady Stanhope, their gardens extending northwards to what was Vigo-lane. To St. James's Hall, originally designed and decorated by Owen Jones, and built by Messrs. Lucas [October 4, 1856, former entrance and interior of the great hall; October 18, 1856, portion of interior of great hall], were added the dinner-rooms in 1875. In 1882 were built the new entrance, having a front of red Mansfield stone and Luton brick, with mosaics, a vestibule with a small hall above it, a withdrawing-room for members of the Royal Family, and a tower rising to 100 ft. [February 24, 1883], by Messrs. Walter Emden & Co., the architects, who, in 1885 and 1891, made further and extensive alterations of the interior.

Piccadilly Circus.—The memorial, dedicated in June, 1893, to the philanthropist Anthony seventh Earl of Shaftesbury (*obiit* 1885) was cast by Messrs. G. Broad & Son, the figure being, we believe, in aluminium, after designs by Mr. Alfred Gilbert, R.A. [July 29, 1893]. Messrs. J. Mowlem & Co. executed the foundation and stone work for the London County Council at a cost of 1,560*l.* The removal in 1894 of the dwarf wall enables one to see the exterior of the lower basin which presents the best part of the purely decorative portion of the design. In a Continental city such a composition would be hailed with expectant appreciation; the ordinary criticisms of the day evinced how little prepared were the general public for so novel a departure from the commonly-accepted type of "fountain" after the bowl-and-pipe kind—as, for instance, in Trafalgar-square. The fountain is awkwardly situated in an awkwardly-planned space, and is out of axis with each of the five roads that meet in an area contrasted with which Seven Dials is regularity itself.

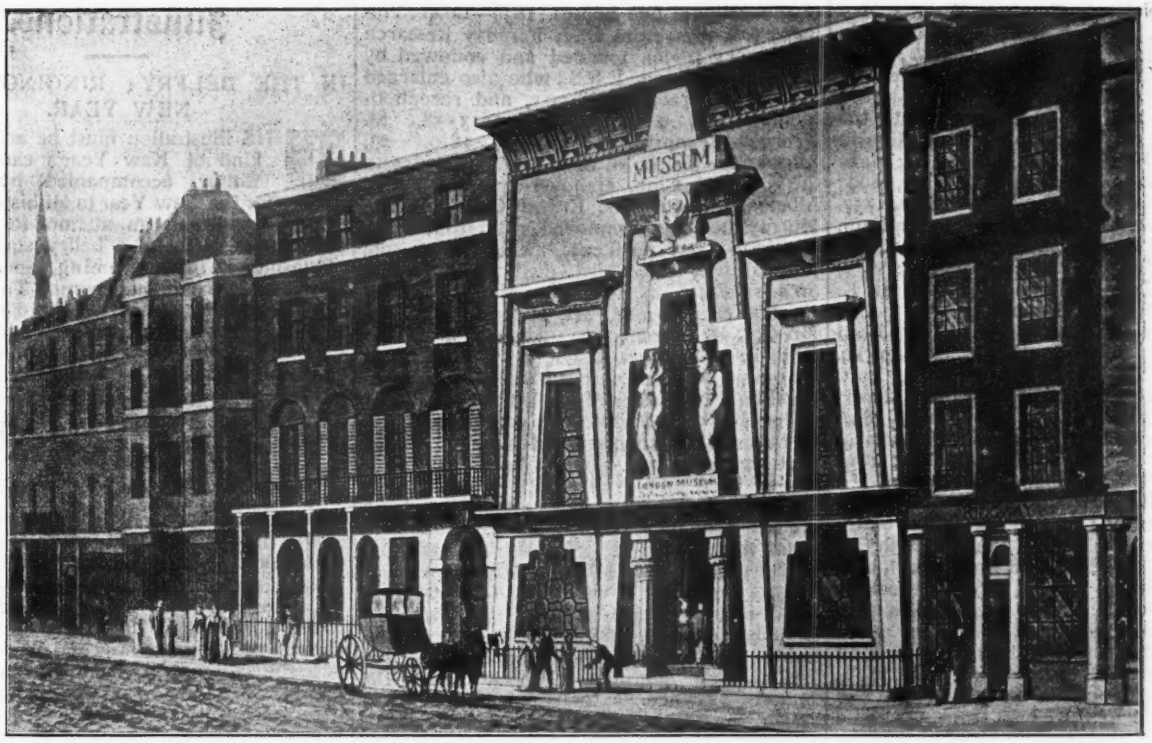
In the winter, 1884-5, the late Metropolitan Board of Works had begun the southern end of Shaftesbury-avenue; in August, 1885, they demolished the three-sided block, including the north-eastern quadrant of Nash's Regent-circus (1820), facing Tichborne-street (formerly Shug-lane) and Piccadilly; they then pulled down the northern side, Nos. 1-11, of Tichborne-street. Under their Act of 1877, 40-1 Vict. c. 235, the Board had acquired land for rebuilding the London Pavilion music hall, opened June 23, 1859, which they bought from Mr. Loibl for 109,300*l.* in 1879, and took into their own management, and subsequently let to Mr. E. Villiers at an annual rent of 7,000*l.* On January 8, 1885, Mr. Villiers contracted to take over the site for 15,000*l.* premium, a ground rent of 3,000*l.*, and a covenant to spend 40,000*l.* upon a new building. Those transactions were investigated by a Royal Commission of Inquiry—Lord Herschell, Mr. Bosanquet, Q.C., and Mr. Grenfell—in 1888. Disclosures then made of corrupt practices on the part of certain members and officials concerned conduced to the abolition of the Board in the following year. The rapid rebuilding of the Pavilion is noteworthy: it was closed on March 25, 1885; on May 11 Messrs. Peto Bros. laid the first brick; on September 25 the music hall, having a capacity for 3,000, was ready for the magistrates' inspection, and on September 30 was reopened. The works, costing 75,000*l.* had occupied four months and three days, 350 men by day and 150 men by night being employed, and there, for the first occasion in London, electrical light was used for building at night time. Steam-saws, and twenty hand-sawyers worked the Westwood stone of which each block ran throughout from 3 ft. to 6 ft. deep in bed, and averaged over 60 ft. The elevations, having frontages to Piccadilly (135 ft.), Great Windmill-street (165 ft.), and Shaftesbury-avenue (155 ft.), and designed by Mr. R. J. Worley, are of Portland stone up to the capping of the plinth and for the columns, with the superstructure of Bath stone from Westwood Ground quarries; the planning and interior equipment are by Mr. J. Ebenezer Saunders [December 26, 1895, with two plans]; the carving, and carved woodwork in the restaurant are by Mr. A. Lonnie; in 1889-90 Messrs. J. T. Wimperis & Arber, and Messrs. Wylson & Long effected interior alterations and improvements.

Neglecting (old) Regent Circus for the while and crossing the road, one notices that the Criterion (opened on November 2, 1873) has displaced No. 221, the White Bear Tavern. Messrs. Spiers & Pond invited fifteen architects to prepare plans and designs for a theatre and restaurant to cost 25,000*l.*, the decorations and equipment excepted; Mr. Clark, of Pain & Clark, acted as professional adviser. The four premiums, from 150 to 50 guineas, were gained by T. Verity (*obiit* 1891), Mr. Phené Spiers, E. Power, and Messrs. Evers & Mileham respectively. Messrs. Hill, Keddell, & Waldram contracted to build up to the party-walls for 7,995*l.*, Messrs. G. Smith & Co. being the general contractors. The building, after T. Verity's plans and designs, was completed at an outlay of 80,000*l.* [July 8, 1871, with front, and plans of two floors]. The theatre, below ground, has a capacity of 800; the ballroom takes up all the first floor of the Piccadilly front, which, as also the façade in Jermyn-street, is of Portland stone, the sculpture being by Mr. Edward W. Wyon. Nos. 208-9, at the corner (west) of Eagle-place, is the St. James's branch of the National Provincial Bank of England, with separated residential chambers in the upper three floors, built by Messrs. W. Brass & Son and, for the iron and steel construction, by Messrs. Handyside & Co., of Derby, after Messrs. A. Waterhouse & Son's plans and designs [May 27, 1893] to replace the former branch bank, No. 212 [June 21, 1873] designed by John Gibson (*obiit* 1892), of which the ground floor has been altered for a restaurant, the front being opened, and two columns inserted to carry the wall above. Passing by the north front of the Museum of Geology, by Sir James Pennethorne, 1836-8, and St. James's Rectory-house, rebuilt in 1848, we see that Nos. 190-2, 193 (Chapman & Hall's), 194-5, and 196 (Pickering's) have given place to Prince's Hall, changed six years ago into a restaurant and hotel, built by Peto Bros. from Mr. E. R. Robson's designs, with busts in the façade by the late E. Onslow Ford, R.A., two symbolical figures by Mr. Verheyden, and carving by Mr. McCulloch [March 13, 1886, the doorway of the Royal Institute of Painters in Water Colours; May 27, 1893, plan]. The restaurant company lately enlarged their premises on the site of Rawling's Hotel in Jermyn-street, employing Messrs. J. T. Wimperis and Arber as architects [June 3 and November 25, 1899, ceiling of reception-room by Mr. H. C. Brewer]. The Egyptian Hall, 1812, by P. F. Robinson, the figures of Osiris and Isis, by Gahagan, had, until sixteen years ago, its counterpart in a similar and, in point of style, a more correct structure, on the east side of Welbeck-street, southern end. It was built at a cost of 16,000*l.* for W. Bullock's natural-history museum and a part of the Leverian collection, dispersed seven years afterwards. During the interval 1812-52 the Hall formed the scene of as many as fifty-three shows, dioramas, and other exhibitions, including pictures by Haydon and Sir George Hayter, Captain Siborne's model of Waterloo (1838 and 1845), now in the United Service Museum, Whitehall; Dupressoir's views of Paris (1835); models of Jerusalem (1847); and Bonomi's panorama of the Nile (1850). In 1852 Albert Smith first gave his popular entertainment—the ascent of Mont Blanc. The Walsingham House block, 1886-7, by Mr. W. O. Milne, stands on the site of Nos. 150-4, Piccadilly, and Nos. 23-4, Arlington-street, the property of Lord Walsingham. No. 23 (or No. 24), Arlington-street, was Sir Robert Walpole's first home in that street; the drawing-room, it is said, is depicted in the second picture of Hogarth's "Marriage à la Mode." The (old) White Horse Cellar is now a parcels receiving-house, No. 155, Piccadilly.

Old Bond-street (1686).—The Western Exchange was built on the site of the Red Horse as a bazaar or appanage to the Burlington Arcade with which it communicated through a door now blocked up. A range of wide galleries, carried upon plain deal squared posts, formed the upper floor, lighted from above. Having been wrecked by a storm fifty-six years ago the Exchange was taken over by Messrs. Holland & Sherry, woollen cloth finishers and dealers, who in 1887 let the premises to a firm of coach-builders; for the latter firm Mr. Wheeler rebuilt No. 10 and rehabilitated the Exchange in the rear. The posts have been ornamentally encased, the galleries thrown open again (their original railings being retained), and some light tasteful decoration added to the woodwork. The London, City, and Midland Bank is by Mr. Gwyther; of other new buildings we may mention No. 22, by F. C. Inwood (*obiit* 1840); No. 23A, by Mr. William Wallace; No. 31, by Mr. Beresford Pite, the "Four Seasons" in the façade modelled by M. Chavalliaud; and No. 39B (on the site of No. 41, where Sterne died) for Messrs. Thomas Agnew & Sons, a house memorable for the robbery there in May, 1876, and the recovery at Chicago in last April of the canvas of Gainsborough's portrait of the Duchess of Devonshire, sold for 10,605*l.* at the dispersal of the Wynn-Ellis collection.

Dover-street.—On December 2, 1897, were sold the materials of Ashburnham House; the site, with the garden, and stables in Berkeley-street, were taken for the erection by Messrs. Prestige & Co. of a block of flats planned and designed by Mr. J. MacVicar Anderson. The house had been the home of the late Earl of Ashburnham, owner of the Stowe, Barrois, Libri, and other famous collections of MSS., dispersed since his death in 1878. Some uncertainty obtains whether the house—one of the finest in this quarter—was that which was built for Henry Jermyn, Lord Dover, who lived in Dover-street, and whose widow sold her husband's house there in 1727.* If, as it seems, the purchaser was John, first Earl of Ashburnham, the house was, or stood on the site of, Jermyn's, situated in a commanding position along the entire side of the steep

* See an interesting article by Colonel Prideaux in *Notes and Queries* of September 18, 1897.



The Egyptian Hall, Piccadilly, amid its original surroundings, as "Bullock's Museum."

incline of Hay-hill to the Tyburn valley. In the Crace Collection is Blyth's print of the porter's lodge and gateway, 1773, designed by Robert Adam for the second Earl, to whom also were due the beautiful interior decorations. No. 34 has been altered and enlarged at the rear, after Messrs. Young & Spencer's designs at a cost of 72,000*l.*, for the Bath Club opened on December 16, 1894; Nos. 47-8 have been rebuilt as the Premier Hotel—Mr. G. D. Martin, 1898; No. 11 is by Octavius Hansard (*obiit* 1897); the (old) Scottish Club, by E. P. Loftus Brock; and No. 35, with stabling in Berkeley-street, was pulled down in June, 1898, for the Empress Club [September 2, 1899, with plans], by Messrs. J. T. Wimperis & Arber, the members migrating from No. 32 in July, 1890. In November, 1896, the Arts Club (1863) quitted "sweet Seventeen," Hanover-square, for No. 40, Dover-street. John Nash lived at No. 29 when he was carrying out his plans for Waterloo-place and Regent-street.

St. James's-street.—When John Crockford retired in 1840 with a heap of bad debts and a reputed fortune of one million and a quarter pounds, there were twenty regular gaming-houses in the parishes of St. James, St. George, Hanover-square, St. Martin-in-the-Fields, and St. Anne, Soho, besides countless "copper-hells" in nearly every part of the town. The house particularly associated with his career was built for him in 1826-7 by Benjamin Dean Wyatt and Philip Wyatt. On the passing of the Act of 1846 the gambling-houses decreased in number, and "Crockford's," from the first a private club, was closed. In 1849-51 it was taken for the Military, Naval, and County Service Club, and then converted into the Wellington Dining-rooms. Ultimately C. J. Phipps (*obiit* 1898) altered the interior for the Devonshire Club. In or about 1835 Ephraim Bond, whose career is sketched in Lord Beaconsfield's novel "Henrietta Temple," and his brothers removed from No. 26 to gambling-rooms, "Raggett's Junior," in the house next to Crockford's at the corner of Bennet-street, since the St. James's Club, and now, as rebuilt, a coachmaker's shop. Brooks's Club (1778) by Henry Holland has been enlarged on the site of two houses in Park-place, 1888. On February 26, 1799, the Literary Club, or The Club, left Parsloe's, in this street, for the Thatched House, and in 1857 the Royal Society Club went thither from the Freemasons' tavern upon the removal of the Royal Society from Somerset House to Burlington House. It was frequented also by the Dilettanti Society (1734), and by John Hunter's club, the Pow-Wow, dissolved in 1830. A part of the tavern, and No. 76, Elmsley the bookseller's, were taken down for the building, in 1843-5, of the Conservative Club, by George Basevi the younger (*obiit* 1845) and Sydney Smirke the elder, whose joint designs were selected in competition — the decorations being by Frederick Sang and his son, Mr. Henry B. B. Sang. The rest of the Thatched House was taken for the Civil Service, since the Thatched House Club, altered and decorated in 1894 under Mr. R. C. Murray's superintendence. Thomas Hopper (*obiit* 1856), who competed for the Conservative Club, was architect of Arthur's, 1826-7, originally White's chocolate house, established on that site at the end of the seventeenth century. The freehold was sold at auction on March 7, 1871, for 46,000*l.* Of Fenton's hotel, No. 63, formerly Peyrault's, or Pero's, bagnio, there is a coloured drawing (1801) by C. Tomkins in the Crowle Pennant; having been demolished in 1888 for the Meistersinger's Club, and since occupied by the New Lyric Club; the house is now the home of the Royal Societies Club. The New University Club established themselves in this street in 1864; having since acquired the frontage to Arlington-street they rebuilt their premises, Nos. 57-8, after Mr. Alfred Waterhouse's plans and designs [May 16, 1868]. The main front is of Portland stone. Messrs. Farmer & Brindley executed the carving, and Messrs. Heaton, Butler, & Bayne the decorations. Palace Chambers and the Post Office have replaced the St. James's coffee-house, which, until 1806, stood at the south end of the street (west side); at the north corner is No. 48, the Royal Insurance Office, built in 1857-8 for the Sovereign Life Assurance Company by Pritchard & Co., contractors, for 45,000*l.* [April 18, 1857], and designed by Sir Horace Jones (*obiit* 1887). The upper part of the façade is of Bath stone, the front of the ground and mezzanine floors, with the cornices and dressings, of Caen stone. Mr. William Farmer executed the carving. For White's James Wyatt (*obiit* 1833) designed a new façade with two porticos, depicted in T. Malton's print of November 15, 1800, which Lockyer altered to its present and more decorative form [April 17, 1852] for Raggett in 1851 when the four bas-reliefs by Sir George Scharf were affixed, the works being carried out by W. Cubitt & Co., and the interior decorations by W. Morant: minor changes, including the famous bow window (1811) had been made by Higgins, John Goldicutt (*obiit* 1842), and J. B. Papworth (*obiit* 1847). Of White's, whose history is that of fashionable life during nearly two hundred years, the lease and effects were sold in 1888 for about 3,000*l.*, and in January, 1899, the club was converted into Recreations, Ltd., which in September of that year was sold for 15,000*l.* on behalf of the debenture-holders. At the corner, south-east, of Pall Mall, is No. 1, designed for the Alliance Insurance Co. by Mr. R. Norman Shaw, R.A., and having a sign [November 14, 1885], hand-forged in iron by Alfred Newman under the superintendence of Lord Battersea, a director of the company. Sir James Pennethorne (*obiit* 1871) designed No. 10, in 1832, for Crockford, as the St. James's Bazaar, with a saloon 190 ft. by 40 ft.; in 1882-3 the premises were readapted for the Junior Army and Navy Club by Wyatt Papworth (*obiit* 1894), who remodelled the front with bay windows in the lower story and added a curb-roof to the return front in King-street.

Berkeley-square.—Sir Robert Smirke enlarged Lord Powis's house, No. 45, and designed the gallery for Lansdowne House (Robert Adam). Mr. H. Huntly Gordon designed No. 3 for his own occupation [June 6, 1896], the front being in Winsley Ground with a plinth of Portland stone: No. 40, by Messrs. Ernest George & Peto [May 1, 1897, No. XIII., "Sketches of London Street Architecture"], was built in 1891 for Mr. W. S. Salting, of brown Portland stone, the iron grilles, with all the metal work within, including some interesting locks, being by Messrs. Starkie Gardner & Co. Two sheets of Horwood's Survey of 1792 and 1819, respectively, remind us of a circumstance that is commonly overlooked in notices of this square. When Horace Walpole removed in October, 1779, from No. 5, Arlington-street, the numbering of the houses began from the south-*west* corner; but in his life-time, or shortly after he died in 1797, the houses were renumbered from the south-*east* corner. Thus the old No. 11 is now No. 42, and the old No. 40 became No. 11—mentioned by Walpole in a letter, October 14, 1779, to the Countess of Ossory:—

> I am come to town this morning to take possession of Berkeley-square. . . . Lady Shelburne being queen of the palace [since Lansdowne House] over against me has improved the view since I bought the house.

No. 11 was afterwards occupied by Walpole's niece, the Countess of Waldegrave; No. 8, where Lord Clive ended his life, is now No. 45; No. 15 was No. 36, and so on. In terms of the London Government Act, 1899, the three parishes, St. George, Hanover-square, St. James, Westminster, and St. Martin-in-the-Fields, have been included in the Royal borough of the City of Westminster.

Some Notabilia.

Piccadilly.—Mr. Leonard Stokes's plan for the Circus [March 26, 1887]; underground conveniences for St. James's Vestry, 3,500*l.*—Messrs. B. Finch & Co. [August 11, 1899, plan]. The Criterion: East room, 1899—Mr. Frank T. Verity; new buffet and smoking-room, 1899, decorated by Messrs. Burke & Co. with marbles from Tennessee and Vermont, U.S.A., first used in England. 1, Henry Egg the gunsmith's, pulled down in 1885. Bullock's Liverpool Museum opened, 1805, at 22, in the room formerly used for Astley's evening performances. 16, Lord Byron in 1806. 23,

birthplace of Nelson's daughter, Horatia, Mrs. Ward, *ob.* 1881; Nelson was then lodging in Arlington-street. *St. James's Church:* East window, by Wailes, 1846; window in memory of the late Mr. Westley, of 24, Regent-street, optician, and another to commemorate the two-hundredth anniversary of consecration in 1684, both by Messrs. Ward & Hughes; choir vestry—Messrs. J. T. Wimperis & Arber, 1899; organ by Harris, 1685, rebuilt by Bishop, 1852. *Melbourne House* (*the Albany*). — Cipriani, Wheatley, and Rebecca decorated the ceilings for Lord Melbourne. The chambers: A. 2, Lord Althorp, Lord Byron in 1814, and Sir E. Bulwer Lytton (Lord Lytton) in 1837; A. 5, George Canning in 1810; E. 1 and F. 3, Lord Macaulay, 1840-56; H. 1, Sir Robert Smirke, 1807-9; K. 1, M. G. ("Monk") Lewis, Lord Clyde, Sir Charles Napier (when Commodore); D. 5, freehold, sold for 600*l.*, November 8, 1892. *Burlington Arcade.*—Installation of electrical light (1899), by Messrs. T. Clarke & Son; ironwork by Messrs. Hart, Son, & Peard, from Mr. A. Baldwin Hayward's designs; 54-5, Messrs. Young & Spencer; 57, reputedly the oldest baker's shop in the West of London, with five houses at the corner of Old Bond-street, area 3,210 ft., bought on July 16, 1897, by the Prudential Assurance Office for 115,000*l.* In 1840 a portico, substituted for the original main entrance and steps of Devonshire House, built by Kent for the third Duke, who died in 1755; the state staircase of marble with a gilt and glass balustrade in the north front, as altered by D. Burton, is also modern; and in 1896 the iron gates from the Duke's house at Chiswick were inserted in the screen-wall, Piccadilly. 80, whence Sir Francis Burdett was taken to the Tower, April 6, 1810; in the "Dictionary of Architecture," Vol. I., p. 135, ascribed to R. F. Brettingham, but in Vol. V., p. 152, to Robert Mylne, between 1806 and his death in 1811. No. 124, Bramah, the locksmith's; 145, Wm. Beckford; 169 was Wright the publisher's, where Gifford beat Wolcot (Peter Pindar) and the *Anti-Jacobin* was published; 177, at the "Aldine Anchor" Pickering's stock sold in 1854; 151B, J. Camden Hotten's; 196, B. M. Pickering, bookseller.

Burlington House.—Royal Academy rooms, Mr. George Murray won the Royal Academy prize for the mural decorations, "Harvest" and "Calliope," at head of stairs to refreshment-rooms [December 31, 1898]. Royal Academy Professors of Architecture since the foundation—T. Sandby, 1768-98; G. Dance, 1798-1805; Sir John Soane, 1805-37; W. Wilkins, 1837-9; C. R. Cockerell, 1839-56; S. Smirke, 1860-6; Sir G. G. Scott, 1867-72; E. M. Barry, 1874-9; G. E. Street, 1879-80; Mr. G. Aitchison, appointed in March, 1887.

University of London, Burlington Gardens.—Sculptured figures: over portico—Bentham, Milton, Newton, and Harvey—Durham; roof-line, western half—Archimedes, Plato, and Justinian—W. F. Woodington; roof-line, eastern half—Cicero, Galen, and Aristotle—J. S. Westmacott; west wing niche—Locke, Bacon, and Adam Smith—W. Theed; east wing niche—Cuvier, Leibnitz, and Linnæus—P. McDowell; roof-line, west wing—Hume, Hunter, and Sir H. Davy—M. Noble; roof-line, east wing—Galileo, La Place, and Goethe—E. W. Wyon (1869). Interior, marble statue of Queen Victoria, 1889—Sir Edgar J. Boehm.

Tichborne-street.—Weeks's Museum opened, about 1803, at 3, ceiling of the big room, by Wyatt, painted by Rebecca and Singleton, contents (see Leigh's "New Picture of London," 1824-5) sold at Christie's, May, 1864; in 1837 showroom of the Rockingham ceramic works, since Dr. Kahn's anatomical museum. *Swallow-street.* — Nearly all absorbed for Regent-street. Scottish church, the oldest in London, now the Theistic church. *Old Bond-street.*—24 and 29, Sir Thomas Lawrence. *Bover-street.*—17, O. W. Holmes, in 1886. *Grafton-street*, 1723.—4, Lord Brougham; flats and shops on site of 12-3—Mr. F. M. Elgood, 1898. Buildings on site of 1-2, and at the corner of Hay Hill—Messrs. Boehmer & Gibbs, 1898. Premises at the corner of Albemarle-street—Mr. R. J. Worley. *Hay Hill.*—A one-story building, 1900—Mr. Basil Slade. *Berkeley-square.*—15, decorated by Gillows, under Professor Aitchison's superintendence; 21, Lady Anne Barnard, authoress of "Auld Robin Gray"; 23—Messrs. J. T. Wimperis & Arber.

Albemarle-street, c. 1685.—The Royal Institution, 1799, library, repository, and theatre (1800), by James Spiller, though ascribed to Thomas Webster, and (1809) to Crake; façade of the original five houses, 1839—Lewis Vulliamy (*ob.* 1871); the Davy-Faraday Research Laboratory (1896), founded and endowed by Dr. Ludwig Mond, F.R.S., who also enlarged the old laboratories, library, and reception-rooms; No. 21, Faraday, 1813-58. St. George's Proprietary Chapel, 1810. 23, Alfred Club (Byron's), 1808, amalgamated with the Oriental Club, Hanover-square, *c.* 1856. Albemarle Hotel—Mr. Ernest George. John Murray the Second removed (1812) from Fleet-street to 50A (Miller's), where his son, John Murray the Third, died April 2, 1892. *Stratton-street, c.* 1693.—8, Messrs. Ernest George & Peto; 17, Mr. R. J. Worley; 16, Mr. C. J. H. Cooper, 1899; a house for Colonel Graham—Soane (*ob.* 1837); 7, W. Gifford; 1, Baroness Burdett-Coutts's, installation of electrical light by Messrs. Townsend & McIntyre, under Mr. V. G. Middleton's superintendence, all the crystal candelabra, lamps, &c., in use for over 100 years past being utilised—gas never having been employed (1894). *Clarges-street*, 1717-8; 3, Lord Macaulay in 1838; 11, Lady Hamilton in 1805; 12, Edmund Kean many years after 1814; 14, W. Mitford, 1808-14. *Bolton-street.* — 11, Mme. d'Arblay, whither Rogers took Scott to visit her. *Charles-street.*—33, Sydney Smith, 1836-9. *John-street.*—Berkeley Chapel, 1880—Sir A. W. Blomfield. *Hertford-street.*—36 (since 35A), Lord Lytton; 10, Sheridan, 1793-1801; 14, Dr. Jenner; 25 (since 26), Charles, Lord Liverpool. *Down-street.*—Almost wholly rebuilt; Hazlitt in 1824. *Hamilton-place.*—Rebuilt 1805, and again since; 1, Lord Eldon many years, until his death in 1838; 2, Queen Caroline; 4, Thomas Grenville, who bequeathed his library to the British Museum.

St. James's-street.—Block of shops and chambers on the site of 66-7 and 1, St. James's-place, 1899—Mr. R. J. Worley; Felix Rowland's macassar oil shop, in front of the Thatched House; 8, Byron, in 1809-13, where he awoke one morning and found himself famous; 29, Gillray, in 1815, his plates bought by H. G. Bohn as old copper; 64, the Cocoa Tree.

St. James's-place.—38, Captain Marryatt, 1832. A house for Sir John Lubbock, Bart.—Thos. Leverton (*ob.* 1824); 22, by James Wyatt for Samuel Rogers (drawing-room bookcase painted by Stothard; Flaxman carved the cornices and mantel-pieces; for account of contents see the *Art Union Journal*, 1847); 13, Mrs. Robinson ("Perdita"); 25, Lord Guildford, and Sir Francis Burdett about twenty years until his death in 1844.

Cleveland-row.—5, Theodore Hook, 1827-31.

Arlington-street.—On pulling down 23, Lord Walsingham's, in 1886, was discovered a distemper painting of Hercules and Omphate (life-size) in the grotto of Mount Tmolus, with a landscape in the background (confer Mr. E. J. Tarver's letter in the *Times*, October 19, 1886); C. J. Fox, in 1804-5, at 9.

Jermyn-street. — Cox's, formerly Dorant's, Hotel—Henry Rhodes and T. Chawner; St. James's Hotel, where Scott rested in July, 1832, on his return for the last time to Abbotsford, now 76, Hammam-chambers; the Baths—Mr. G. Somers Clarke. *Bury-street.* — Properly Berry-street. Marlborough Hotel, on the site of Ramsay's Hotel and 12, with 12 and 14, Ryder-street, by Messrs. John Bennett & Co., 1897-8—Mr. G. D. Martin; buildings on site of 36, and 19 and 21, Ryder-street—Mr. R. J. Worley; 33, Thomas Moore, 1804; Steele's house (1707-12)—"the third house, right-hand turning out of Germain-street," he writes to his wife—pulled down in 1830. *Bennet-street.*—4, Lord Byron, winter of 1813-4. *Duke-street.*—8, Marryat, in 1837-9; 10 (Sussex-chambers), Thomas Campbell, of the Literary Polish Association, 1832; 15, Thomas Moore in 1833.

PROPOSED EXTENSION OF GALASHIELS MUNICIPAL BUILDINGS.—A special meeting of Galashiels Town Council was held on the 26th ult. for the purpose of inspecting the sketch plans of the proposed extension of the municipal buildings. The architect, Mr. John Hall, was present, and explained the sketches which he had prepared, showing offices and Boardroom for the Parish Council, Burgh Chamberlain, police-cells, chargeroom, and Chief Constable's room on the ground floor; Town Council chambers, courtroom, two committee-rooms, two witness-rooms on the first floor; and offices for the Burgh Surveyor and water officer and store-rooms on the second floor. The two plans which the Committee were most satisfied with were estimated to cost 4,100*l.* and 4,250*l.* respectively, exclusive of architects' fees.

Illustrations.

IN THE BELFRY: RINGING IN THE NEW YEAR.

THIS illustration must be accepted as a kind of New Year's card from the Editor, accompanied by his best wishes for the New Year to all his readers.

The drawing is an attempt to convey the picturesque effect of a belfry stage with the old-fashioned timber framing, especially when all the bells are in full swing. The music of the bells is indicated in the stave underneath, ending, as is often done on occasions of rejoicing, with three clashes of the whole peal. The eight bells do not all come into the picture; that would have been difficult to manage; but the others may be imagined.

H. H. STATHAM.

"COMMERCIAL ART."

IN this composition I have attempted to show how commercial buildings can be invested with picturesqueness. Before the age for modernisation set in there were many Flemish towns in which the buildings devoted to trade were conspicuous for their beauty. The divorce between business and art in the realm of architecture is of recent origin. There is no necessary antagonism between picturesqueness and utility; even such structures as the warehouse and the crane can be made pleasing to the sight; indeed, Pugin somewhere says that the railway-station affords opportunities for architectural display excelled only by the cathedral. Unfortunately, the modern "practical man" thinks that when artistic design is considered utility must be sacrificed; and this erroneous idea, more even, perhaps, than lack of taste, is responsible for the hideousness of so many of our commercial buildings.

H. W. BREWER.

THE GIANT'S STAIRCASE, DOGE'S PALACE, VENICE.

THIS illustration, from a beautiful sepia drawing by Mr. A. C. Conrade, shows the celebrated staircase from a rather new point of view. The colossal statues of Neptune and Mars are by Sansovino.

The artist has rendered the scene more real and interesting by peopling it with figures in the costume of the sixteenth century.

RICHMOND BRIDGE.

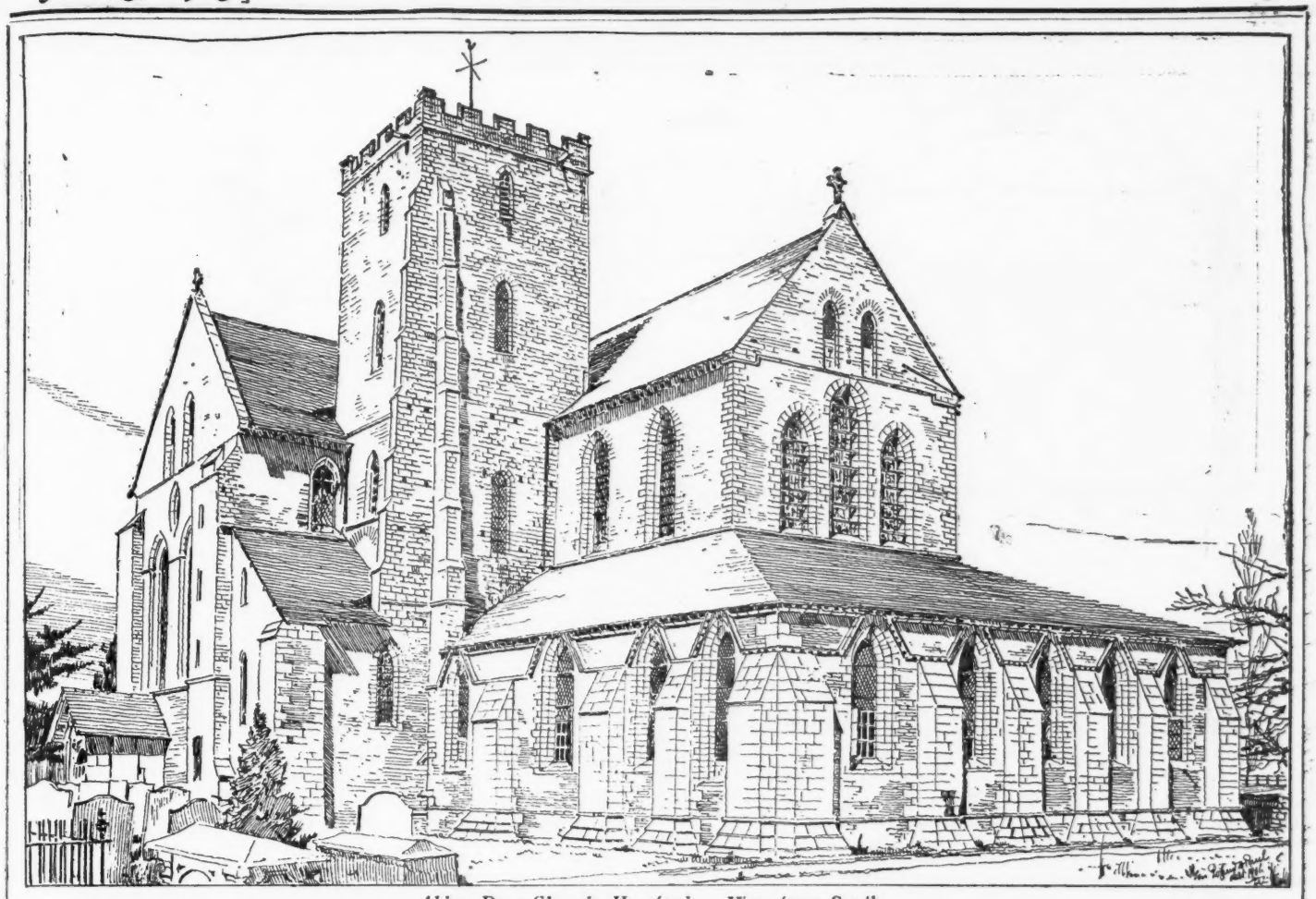
MR. MONK'S effective drawing of Richmond Bridge will, we fear, have soon to stand as a memorial of that which has passed away. It is understood that Richmond Bridge is to be destroyed, under the usual pretexts of heavy gradient and insufficient width. The traffic over it is not large, and in our opinion it might very well stand for the present; but one knows by experience that when once the idea of pulling down a picturesque old bridge is mooted, nothing will long stop the joy of the authorities in the work of destruction. It would be perfectly possible to build a new bridge as picturesque as the old one, with the required gradient and width; but we can have no hope that any attempt to do this will be made, and probably the old bridge will be replaced by the kind of thing that County Council engineers produce.

The bridge was built in 1780, from the designs of James Payne.

DESIGN FOR A MODERN ANGLICAN CATHEDRAL.

WE were so struck with the fine character of the "Sketch Design for a modern Anglican cathedral" submitted by Professor Beresford Pite in the Liverpool Cathedral Competition (and passed over without recognition by the assessors), that we proposed to him to make a perspective of his design for publication in this issue, which has been done with his consent and approval.

The lines of the perspective were laid down by Professor Pite's assistant, Mr. Wingate, and the drawing was finished by Mr. W. Curtis Green. A birds-eye view was adopted as the only means of showing the grouping and arrangement of the buildings; this does not give the best aspect in regard to architectural effect, as it shows too much of roof expanse



Abbey Dore Church, Hereford. View from South.

which would not in an ordinary view be ri minently seen, or seen at all; but architects mi be able to allow for this, and to appreciate the drawing what would have been the effect of the building as seen from the usual spectator's standpoint.

ABBEY DORE, HEREFORD.

THE Cistercian Abbey Church of Dore stands about a couple of miles from the southern end of the Golden Valley, twelve miles west of Hereford. The Abbey is said to have been founded in the reign of King Stephen (*circa* 1147) by Robert de Ewyas, the site of whose castle at Ewyas Harold, about a mile and a half west, is still to be seen. Among its many benefactors were Roger de Clifford, Alan de Plokenet (Lord of Kilpeck), Robert second Earl Ferrers, and the Sitsylt, ancestors of the great family of Cecil. In 1260 Bishop Aquablanca of Hereford issued a letter appealing for funds to complete the church, and in the time of Bishop Cantelupe (1275-1282) a consecration took place, which probably marks the completion of the building. John Radburn was the last abbot, and at the dissolution of the monastery in 1535, he was given a pension of 14*l.* a year, and the buildings and site were granted to John Scudamore. The buildings appeared to have been in ruins until 1633-4, when Lord Viscount Scudamore restored the transepts and presbytery as a parish church for Dore. It was reconsecrated on Palm Sunday, 1634, with much ceremony at 8 o'clock in the morning. He erected a screen under the eastern arch of the "crossing," and this, and other woodwork, still remains. A tower was also built in the angle of the presbytery and south transept.

The repairs, now partially completed, were commenced in October, 1901, and included the taking up and relaying of the floor of the transept and presbytery, the repair of the presbytery roof and ceiling, and the provision of a system of drainage, and removal of accumulated earth from round the exterior. The parapet of the tower having become dangerous has been reset in cement. During these repairs much of great interest has been found, including the original position of the high altar, some of the screen walls dividing the eastern chapels and the foundations of three of the altars, a great number of interesting heraldic paving tiles, old glass, and numerous carved stones. A leaden heart case was also found in the centre of the presbytery, which may possibly have contained the heart of Bishop de Breton, which was buried here.

The view of the interior of the presbytery shows the fine late Transitional work of this part of the church, and the ambulatory and chapels beyond. The altar slab is the original one, discovered by Scudamore, set up by him on "three pillars of stone." The rails enclosing the Sacrarium are of his date; also the glass in the three lancets above. On the extreme left is seen the north door, with its thirteenth-century ironwork (see measured drawing in *Builder*, April 8, 1893). One of the rings for the Lenten Veil still remains high up in the wall between the wall shaft and the lancet eastward of it, and another remains on the south side. The interesting diminutive effigy of a Bishop, formerly lying loose in an aumbrey in the north aisle, has been fixed, where shown, just within the Sacrarium, and in the floor, flanking the altar, many of the heraldic tiles have been relaid. The paving, raised by Scudamore, has been lowered to the original levels, exposing the moulded bases throughout the church.

The drawing has been recently made by the architect, Mr. Roland W. Paul, and other views, plans and details by him will be found in the *Builder*, April 8, 1893; April 4, 1896; July 8, 1899; and November 15, 1902. The exterior view shows well the general design of this part of the church, with the large bell-tower that Lord Scudamore erected. This tower, as became evident during the recent repairs, is largely, if not entirely, constructed of worked stone obtained from the ruins of the nave, and the large amount of stone required for this and for blocking up the large arches, and other openings, on the west and north sides, accounts for the almost entire disappearance of worked stone from the western portion of the nave. The aisles and eastern chapels were no doubt finished with a parapet when the gables over the windows were complete, and it seems pretty clear that the main roofs were finished with parapets also.

ILLUSTRATIONS OF CHRIST'S HOSPITAL SCHOOLS, HORSHAM.

WE give in this number several illustrations of the new buildings of Christ's Hospital Schools at Horsham, as the most important work completed in England during the past year.

They include a view of the east end of the chapel, from the architects' drawing, and views of the exterior of the school hall, a detail of the entrance to the hall, and the exterior view of the dining-hall. These are from photographs by Mr. Fry, of Brighton.

The buildings as a whole have been already pretty fully described in our columns, but the architects send us the following particulars in regard to the illustration of the east end of the chapel:—

"The east end of the new chapel of Christ's Hospital has been beautified by contributions from old Blues, who have provided the altar, ornaments, and reredos shown in the view; the stained glass in the window over the organ being a special contribution from an old Blue.

The reredos represents Christ in glory, surrounded by the twelve Apostles, and in the panel below is Christ receiving the children. It has been executed in Bath stone, by Messrs. Daymond & Son; the Apostles being carved by Mr. W. S. Frith, and the remainder of the sculpture being by Messrs. Fagan & Bell.

The altar is in mahogany, inlaid with holly, executed by Messrs. Norman & Burt, of Burgess Hill.

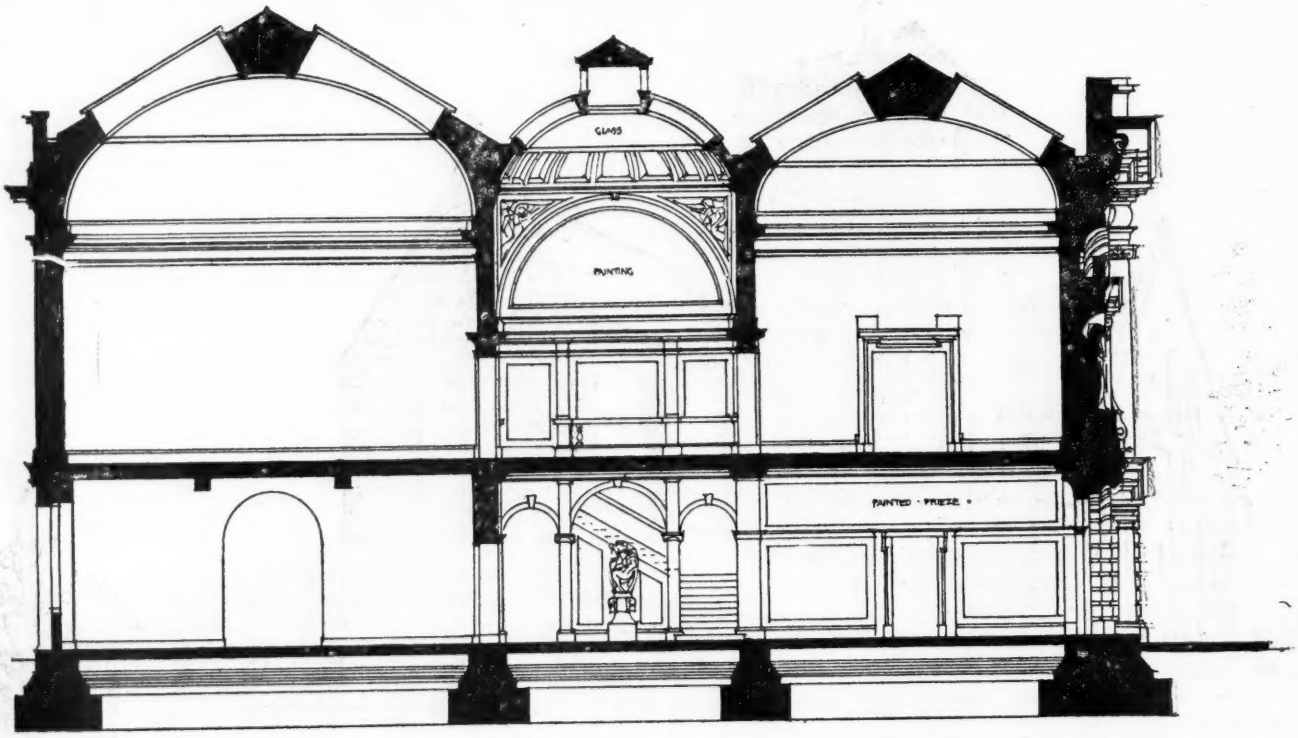
The window is by Mr. T. R. Spence, and the organ by Mr. Alfred Kirkland."

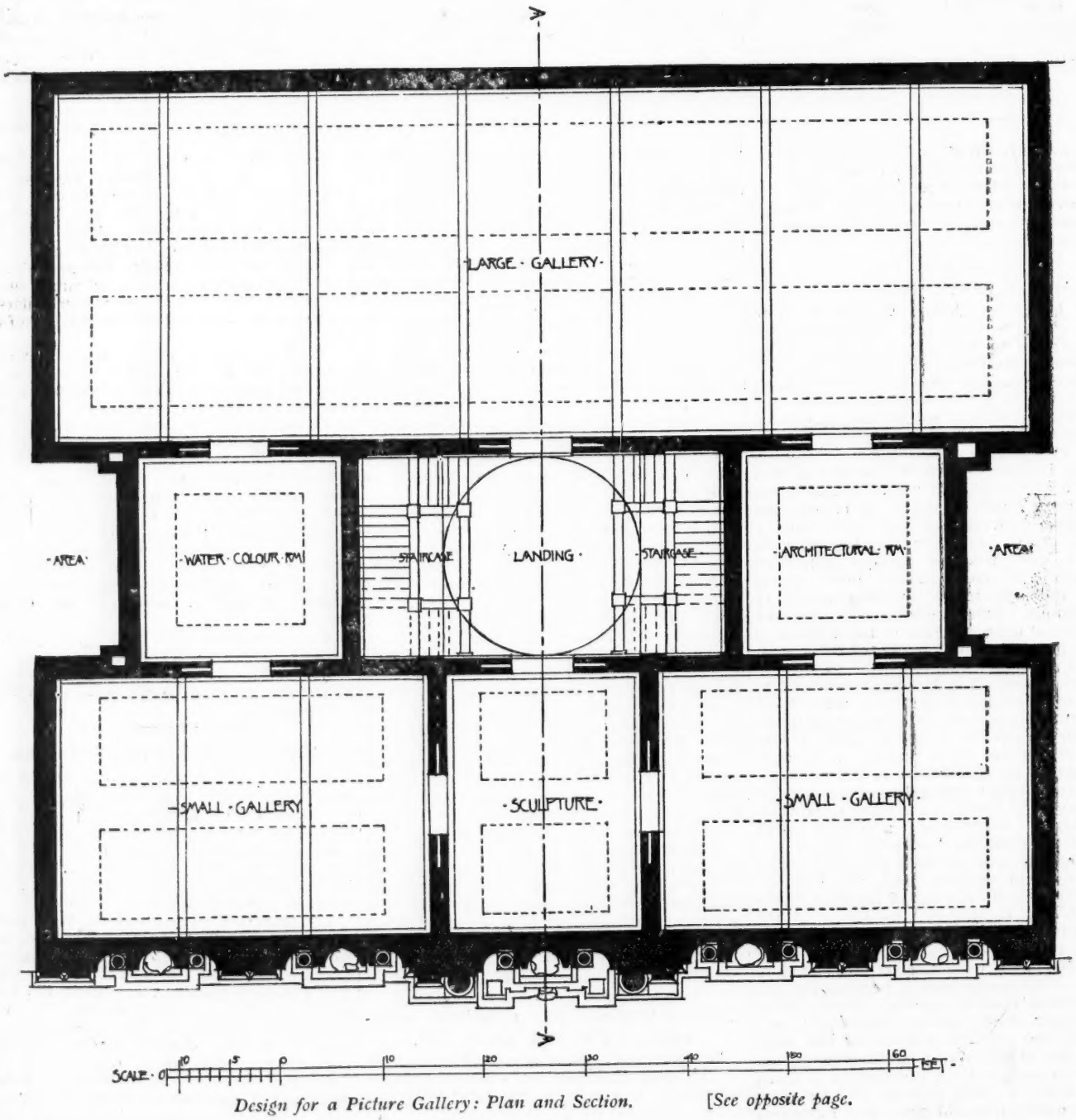
The architects, as most of our readers are aware, are Mr. Aston Webb, A.R.A., and Mr. E. Ingress Bell.

THE HÔTEL DE VILLE, TOURS.

THIS is an illustration of one of the most important public buildings completed in France during the past year. The architect is M. Laloux, who not many years ago made a brilliant success as a Prix de Rome man, and has since attained the professional success which in France always attends an architect who has shown distinction as a student.

The modern French Hôtel de Ville nearly always follows a certain recognised type, as in this instance; a symmetrical classic treatment with high roofs and a central lantern. The Tours building presents, as regards the treatment of the masonry design, a very favourable example of the best qualities of modern French classical design, dignified and symmetrical as a whole, and with grace and finish in the treatment of details. The effect of the roofs is not quite so pleasing; both they and the central lantern are somewhat heavy in effect, to our thinking; but as a





Design for a Picture Gallery: Plan and Section. [See opposite page.

whole it is unquestionably a fine and appropriate example of municipal architecture.

We should have been glad to have given a plan and some further particulars of the construction; but unfortunately we have found, in this as in other cases, that it is nearly impossible to get any information from French architects as to their works.

The illustration is from a photograph taken specially for the *Builder* by M. Lévy, of Paris.

DESIGN FOR A PICTURE GALLERY.

WE have pleasure in publishing two illustrations of the fine design by Mr. J. B. Fulton for "A Picture Gallery for a Country Town," by which he gained the Royal Academy Travelling Studentship in Architecture for 1902.

In regard to his intentions in the design, Mr. Fulton writes:—

"The conditions were that the building was not to exceed 100 ft. by 90 ft. I chose a street frontage with buildings on either side, as I thought that a likely site for a small town.

There are two points regarding the façade that I would like to draw attention to. The first (which is not evident) is the row of niches, which was suggested simply through the study of Italian, English, French, and Spanish Classic Renaissance. The next point is the proportion of the façade, which was arrived at by not taking into consideration the floor of the gallery, as is usually done, and specially emphasising it by a strong, unbroken band; if I had done so the building would have been divided into two, which is undoubtedly bad. By doing away with what has been considered a rule in architectural design, I have got a proportion which I could not possibly have got any other way."

ILLUSTRATIONS OF JAPANESE ORNAMENT.

THESE two sheets are from drawings by Mr. F. T. Piggott, the author of the article on Japanese ornament which forms the second article in the present issue, and are referred to and described there.

ILLUSTRATIONS OF OLD LONDON.

THESE illustrations are given in connexion with the article on the Piccadilly neighbourhood, and its changes during the past century, published in this issue.

They are photographed from drawings in the Crace Collection at the British Museum.

THE ARCHITECTURAL DEVELOPMENT OF LONDON.*

THE geographical distribution of the City, or the County as Greater London is now known, is a flat river basin in which the river takes a circuitous course from west to east. The existence of this river has not only determined the original site of London, but it has also operated to mark out the line of general growth and the direction of the main streets. On both north and south, some distance from the river on either side, are ranges of low hills, and it is chiefly between these two ranges that London has grown, though on the southern side the hills have long ago been built over and the City has passed far beyond them. In order to obtain a clear idea of how London has grown, it is, perhaps, desirable to classify its history into certain distinct stages. These stages seem to fall naturally under the following heads:—

1. The birth of Westminster.
2. The birth of London.
3. The junction of Westminster and London.
4. The Mediæval City.
5. London's lost opportunity.
6. The Northern Boulevard.
7. The works of the Ducal Landlords and of Prince Regent.
8. The works of the Democratic Councils.
9. Future London.

1. *The Birth of Westminster.*—If the student of London's history will take a map, he will be struck by a long straight road running from the extreme north-west corner of the map to Hyde Park, and he will also be struck by another road, not perhaps quite as straight, but forming evidently a main highway from the centre of South London to the eastern edge of the map. He will probably surmise that these roads, known by the name of Edgware-road and Peckham-road respectively, have some connexion, and his surmise will be accurate, for these two roads were originally one, and were known by the name of the Watling-street, connecting the south coast of England near Ramsgate with the northern districts of the county.

It was not possible to cross the River Thames near its mouth, owing to its depth, but about the spot where the Abbey of Westminster now stands the river spread its course over many miles of marshes, and when the tide went out it became comparatively easy to cross the river on foot. In the midst of these great marshes was a small hill, known as "Tot Hill," and it is probable that on this little hill were arranged some buildings to rest man and beast on their journey to the north. On this spot the Romans also erected some buildings, but later on the spot fell into disuse, owing probably to the construction of a bridge across the river lower down, and the diversion of the ancient Watling Street across the new bridge. For some centuries after this it is probable that Westminster was nothing more than a waste; but during Saxon times it seems to have been regarded as a suitable spot for the residence of the kings. The Saxon King Edgar is supposed to have displayed a great interest in this district, and to have founded the present Abbey, endowing it with a great manor. Whether the Danish King Canute and his sons lived here or not is uncertain, but it is clear that King Edward the Confessor was devoted to Westminster, that he lived there himself, and that he built a great church on the spot. Though this king died nearly a thousand years ago his tomb still remains in the central chapel of the present Abbey, and his shrine is still visited annually by devoted Roman Catholic pilgrims. From this date continual works were in progress, developing and extending the Abbey and its precincts. The kings also enlarged and beautified their palaces, and the present Westminster Hall—built in 1398 by Richard II.—occupied the site of a previous building by William Rufus in 1099. It would seem almost a natural development that the seat of the Sovereign power should become also the place of judgment, and this was the case. It is only within our own times that the Law Courts have been removed from Westminster.

2. *The Birth of London.*—The earliest written reference to the existence of London was made in the year of our Lord 61 when the Roman Historian Tacitus informs us that it was a place of comparatively large population. Although the note of Tacitus is the first written reference to London, legend says that the Trinobantes had a settlement on the present site of London years before the Roman invasion, and it is reasonable to suppose that this was so. Archæologists incline to the view that the name London was originally spelt "Llyndin" which means the Lake Fort. It has already been explained that the greater part of the site of present London was so near the river level that at high tides the river spread out over these low-lying lands and took the form of a lake. About the site of the present London Bridge, however, the land was of a higher altitude, and beyond the reach of the highest tides. The effect of this change of configuration was at once to produce a navigable river and also to ensure dry land at the side eminently suited for the construction of wharves and houses. Such a position was almost ideal for the settlement of merchants in those days when the only law was the sword. This spot was bounded on the south by the River Thames, on the west by a smaller tidal tributary known as the Fleet, on the east by marshes difficult to cross, and on the north by dense forests. Here, then, was a site for a city from which merchants could reach through their ships the whole of the then known world, and yet upon which their goods could be stored in comparative safety and security. The river which washed its shores was too deep to ford, but a ferry probably existed from very early times. The exact date when the ferry was replaced by a permanent bridge is not known, but when the foundations of the present London Bridge were excavated in the early part of last century, numerous coins were found in good preservation bearing the effigies of the Roman Emperors Constantius and his sons, Crispus and Constantine, and with the syllable "P. Lon" as mint mark.

This indicates not only that London was at that period (A.D. 309) important enough to be the seat of a mint, but also gives ground for the view that these coins in some form or other commemorated the construction of the bridge. This view is supported by the fact that evidences of Roman occupation have been traced along the line of the southern access to the bridge. During the early years of the Roman occupation London was known by the name of "Londinium," but towards the end of the Roman occupation the name was changed to "Augusta." It is clear that the construction of the bridge would have tended to divert the line of the old Westminster ford, and this is what actually seems to have happened. The old road passing down Edgware-road, and known as Watling-street, was diverted at the Tyburn or about the present site of the Marble Arch. From this spot a new Watling-street was made to London Bridge, and this new road seems to have been the origin of the present street called Holborn. It entered the City at Newgate, and thence sought the Bridge. The Romans had another road from the Bridge that went northwards. It occupied approximately the site of the present Bishopsgate-street. From this a branch road to the right went to Colchester, an ancient Roman camp in Essex. In the early years of the Roman occupation a wall round the City was not considered necessary, but later on, about the middle of the fourth century, a wall was built surrounding the whole city. This wall enclosed an area of about three square miles. There were two land gates, three water gates, and a gate to the bridge.

It is very difficult to say what happened after the Roman Legions were recalled to Rome. Deprived of their natural protectors, the merchants must have felt their energies snapped. At all events, it seems clear that there was an interval of many years during which London was gradually deserted. Walls became ruins, grass grew again in the streets, and it was not until late in the Saxon period that it once again regained its traditional importance, and henceforward was recognised as the capital city.

3. *The Junction of London and Westminster.*—It is clear that between the King's stronghold of Westminster, with its adjacent powerful Abbey, and the great commercial City of London frequent communication was necessary, and the line of this communication naturally followed the curve of the river. This road became known by the name of the Strand. On the borders of this street were grouped various communities who found the position convenient. The sites between the Strand and the River were used for the palaces of the great nobles. Essex-street marks the site of the town house of the famous Earl of Essex; the adjoining land was the property of the powerful Duke of Norfolk; Somerset House, the Savoy, the home of the Cecils, Northampton House (afterwards Northumberland House), and other great palaces linked London with Westminster on the river bank, while further north there were many settlements of monks and lawyers. The Knights Templars settled on a site south of that portion of the Strand nearest the City of London, and this portion was known by the name of Fleet-street. It crossed the River Fleet by a bridge, and entered London by the ancient Roman "Lud Gate." At its other end the Strand was connected with Westminster by what is now known as Whitehall, and this district was, even in Mediæval times, an aristocratic place of residence.

4. *The Mediæval City.*—Throughout the reigns of the Mediæval kings London grew in wealth and importance. It did not spread very far, but the walls that the Romans had built were slightly enlarged. Within the walls, however, the city was continually becoming more picturesque. The great conventual buildings of St. Paul's, which legend affirms occupied the site of a Roman temple, were demolished in the early part of the fourteenth century, and in their place rose the magnificent Gothic cathedral, with a spire rising to the extraordinary height of 520 ft. In the reign of Henry II. an eager citizen, Fitz Stephen by name, gives us some idea of the beauties of the City. He tells us of the large number of churches in the City which in his day were already 126 in number, and described the houses, with their overhanging gables and

* A paper by Mr. Owen Fleming, A.R.I.B.A., read at Washington before the American Institute of Architects on Friday, December 12.

the line of booths in the streets. At this date the Tower of London had been well advanced, and away from the main streets Fitz Stephen tells us that there were many houses well furnished with trees, spacious and beautiful.

The Londoners of those days seemed to have lived a merry life, and we hear later of such magnificent pageants as the triumphal entry of Henry V. after the Battle of Agincourt, welcomed by the wonderful chorus of the priests, which even now seems of impressive grandeur.

London was also the scene of stirring political events. It was a Lord Mayor of London who struck down the sturdy Kentish peasant, Wat Tyler, and, later on, Sir Thomas Wyatt marched through London in insurrection against Queen Mary. This was the beginning of sad times for London, and the memory of the burnings of noble divines and others, culminating with the martyrdom of the Bishop of London in 1555 and a year later, of the Archbishop of Canterbury himself, made an impression that is even yet vivid in the minds of Londoners.

5. *London's Lost Opportunity.*—The era of the Renaissance brought sadness to London. The growth of the City was even in those days causing alarm, and it is interesting to read the proclamation on this question issued by Queen Elizabeth in the year 1580 :—

"The Queen's Majesty, perceiving the state of the City of London and the suburbs and the confines thereof to increase daily by access of people to inhabit in the same, in such ample sort, as thereby many inconveniences are seen already, but many greater of necessity to follow. . . . .

For remedy whereof, as time may now serve, until by some further good order be had in Parliament or otherwise, the same may be remedied ; Her Majesty, by good and deliberate advice of her Council, and being also thereto moved by the considerate opinions of the Lord Mayor, Aldermen, and other the grave wise men in and about the City, doth charge and strictly command all manner of persons of what quality soever they be, to desist and forbear from any new buildings of any house or tenement within three miles of the gates of the said City of London, to serve for habitation or lodging for any person, where no former house hath been known to have been in the memory of such as are now living ; and also to forbear from letting or setting or suffering any more families than one only to be placed, or to inhabit from henceforth in any one house that heretofore hath been inhabited. . . . .

"Given at Nonesuch, the seventh day of July, 1580, in the two-and-twentieth year of Her Majesty's reign."

King James followed the example of Queen Elizabeth, and forbade the building of houses in the suburbs ; but this artificial prevention of natural expansion had its inevitable result. The houses within the City walls crowded more and more closely together, and it is not surprising that such overcrowding, coupled with the absence of sanitary regulations, resulted in a considerable amount of sickness. The visitation increased in virulence, and ultimately took the form of the plague. There are probably few persons who have not shuddered at the thought of this great City at the time of the plague. All business ceased, the streets were deserted, and the grim silence was only broken by the rumbling wheels of the death-cart and the hoarse cry echoing through the empty streets, "Bring out your dead !" There was no time for ceremonious burying. Great pits were dug round the City, and the bodies were tipped into them from the carts pell mell without coffins or even grave-clothes.

The terrors of the plague were, however, from an architectural point of view, perhaps of less importance than the great disaster of the fire in 1666. There have been other fires more extensive in character, perhaps, than this, but probably the destruction of rare and precious objects has never been equalled. In five days London lost her magnificent Cathedral, the Exchange, the Custom House, the beautiful halls of City Companies, and numerous churches and chapels stored with rich vestments and priceless ornaments. In all 396 acres of houses, 400 streets, 13,200 dwellings, eighty-nine churches, besides chapels, and four of the City gates were destroyed.

But if London had lost what could never be replaced, here was an unique opportunity for the reconstruction of the City on a monumental plan, and the great architect of the day, Sir Christopher Wren, rose to the occasion and produced such a plan. It was perhaps the first scheme on a large scale for the design of a city, and it is well worth the closest study. Wren was handicapped by the lines of the old streets that had not been burned, but he utilised these as the basis of his plan. The old Leadenhall-street was to be carried straight through to the "Lud Gate," passing the Royal Exchange, which was arranged to be the centre of a scheme of radiating streets similar to those around the Capitol at Washington. St. Paul's was placed majestically fronting the wide place formed by the junction of Leadenhall-street, with a new street of equal width nearly parallel to the river. The river itself was embanked with a spacious quay the whole way from the Temple to the Tower, and in front of London Bridge was created a great circus from which again streets radiated in all directions. It is melancholy to have to record the fact that this great scheme was brushed on one side by the haste of the commercial interests to begin rebuilding, and by the unwillingness of the citizens to co-operate for the common good. London thus lost an opportunity that will never recur.

6. *The Great Northern Boulevard.*—As might have been expected, the edicts of Queen Elizabeth and King James against the extension of the City were set aside by the catastrophes of the days of King Charles II. The geographical situation which had first marked out the site of London as eminently suited for commerce continued to exist, and with the development of civilisation in Europe and Asia, London continued to form the centre of attraction for great numbers of people. The City spread far beyond the ancient walls. The space between the Strand and the ancient Watling-street or Holborn became filled with houses. Even this extension was insufficient, and the City spread still further northward. Traffic increased, and it became clear that some further means of communication was required in the north. This was carried out in the reign of George II by the construction of a series of roads beginning at the old "Moor Gate," passing to Islington, descending the Pentonville Hill and running past the church of St. Marylebone to the village of Paddington. This road was designed on a far more liberal scale than any of the mediæval roads, and although its width has been allowed to be encroached upon here and there, speaking generally, the road maintains the characteristics of a boulevard, and it is likely that it will continue to do so.

7. *The Works of the Ducal Landlords and the Prince Regent.*—Towards the end of the eighteenth century, the number of rich citizens of London had materially increased. Moreover, the rapid advancement of learning, the increased attention given to the fine arts, and the general desire for more healthful habitations caused a continually increasing demand for dwelling-houses of a more stately character than those which had previously been found sufficient. The result of this movement was to bring into the building market the large estates and manors of the Dukes and other nobles to the north and south of the Old Holborn and its westward continuation of Oxford-street. Whatever political view may be taken of the question of large leasehold estates, architects are bound to chronicle with gratitude the liberal way in which these estates were laid out. The usual plan was to form a large open square, to plant trees and shrubs therein, and to arrange the houses facing upon the road surrounding the square. Frequently the whole of these houses were designed with a view to their architectural symmetry, and there is something very attractive about these great London squares which still are favourite residential quarters. It is a matter of regret that this system of forming squares has not been followed in recent building estates.

At the beginning of the nineteenth century a combination of circumstances arose that materially altered the aspect of West London. The then Prince Regent (afterwards George IV.) was in power, and exerted his influence to carry through a scheme of rebuilding that in those days might fairly lay claim to the title of majestic. The Prince Regent's palace was then known as Carlton House, occupying the "place" now existing between the Athenæum and the United Service Clubs in Pall Mall. In the north-west of London were some large open farms, which had previously formed part of the lands of one of the houses of Henry VIII. The leases of the farms were falling in, and the Prince Regent conceived the idea of connecting a broad street from his Palace of Carlton House to these farm lands (now Regent's Park), which were to contain a country house for him. The architectural opportunity thus afforded was a great one, and the Prince Regent was fortunate in finding an architect, Mr. John Nash, who designed the whole scheme. Americans who visit London are familiar with Nash's fine achievement. The skilful way in which the lower part of Regent-street (as the new street was called) was placed at right angles to the Palace, and connected with the upper part of the street by a majestic quadrant ; the circuses which cunningly disguise the crossings of the new street with Piccadilly and with Oxford-street ; the way in which the spire of All Souls' Church was brought forward to mask the awkward sweep into Portland-place ; the fine semicircular treatment where Portland-place enters the Park ; the width of the new streets ; and the dignified designs for that period of the buildings fronting the streets, form a striking tribute to Nash's genius. He was also far-sighted enough to foresee the possibilities of forming the present Trafalgar-square, and he did this by driving Pall Mall through until it reached the top of the present square. The whole improvement was a great one, though perhaps its savour is rather too artificial and reminiscent of the dandyism of Beau Brummel to be altogether in accord with modern taste ; yet it is right to give this work a foremost place in the architectural development of London. It is a curious instance of the irony of human life that the Prince Regent's proposed residence in the Park was never built, that financial considerations caused the demolition of his palace of Carlton House, and that the fine colonnade that Nash built along Regent-street to shelter the exquisites of the day has been swept away by an unsympathetic posterity.

8. *The Works of the Democratic Councils.*—If London in the eighteenth century were dominated by the aristocrats, the London of the nineteenth century passed from under their sway and gradually became more and more democratic in its government and in its ideals. One reason for this change was the development of free political institutions all over the country, another was the growth of the more purely commercial instinct, and perhaps a third reason is to be found in the extraordinarily rapid growth of the population. The ancient Cities of London and Westminster were no more than islands in a great sea. North, south, east, and west, the City was spreading in an all-devouring fashion. Railways and tramcars were introduced and helped in this development. Some form of common government became necessary for the whole agglomeration. Government commissioners who were first appointed were found unequal to the need, and they were succeeded by an indirectly elected council which governed London for many years, but which was in turn supplanted by a Council elected directly by the people. Even this government was held to be insufficient for the occasion, and its energies have recently been aided by the creation of numerous subordinate cities and boroughs who have each their own mayor, aldermen, and councillors, and who are entrusted with a considerable amount of local autonomy. The work of these nineteenth-century councils in the further development of the planning of London is set forth in a most lucid manner by Mr. Percy Edwards in his "History of London Street Improvements." Mr. Edwards tells us how, during the century, new lines of traffic have been opened and streets widened in all directions. The most notable of these improvements have been (*a*) the embankment of the Thames and (*b*) the junction of Holborn with the Strand. The Thames Embankment had long been a public ideal. It was unfitting that a City of the magnitude of London should be intersected by acres of offensive mud banks, and between the years 1865 and 1875 three and a half miles of these mud banks were embanked by a road generally 100-ft. wide at a cost of nearly 12½ millions of dollars. Between this road and the City beautiful gardens were laid out, and the crowds that throng this thoroughfare on fine summer evenings and listen to the municipal bands, playing in the municipal gardens, form some evidence of the way in which this great work is appreciated by the people of London.

The junction of Holborn with the Strand is now in progress. It is an improvement of the

highest architectural importance, and will profoundly affect the future of the City. On referring to the map of London, the observer cannot but be struck with the insufficiency of through lines of communication from north to south. The ancient Edgware-road forms one such thoroughfare, Regent-street another ; but between Regent-street and the Great North road of the Romans, now represented by the Kingsland-road, there is no really adequate north and south thoroughfare. It will be seen, however, that the means of making such a thoroughfare exist. On the north there is the line of streets beginning at Southampton-row and continuing to Hampstead, while, at the south, Waterloo-road forms a similar beginning of a series of streets running to the far south. The essential object was to connect these two detached lines of traffic, and this has been effected by the new avenue now in course of construction. Many plans for this avenue were laid before the London County Council, and it is pleasant to be able to record the fact that the scheme which met with universal approval and consequent adoption was based upon a scheme submitted by the Royal Institute of British Architects. The new street will be 100 ft. wide, or 10 ft. wider than Regent-street. At its southern end it bifurcates into the form of a crescent. The arms of the crescent are each 100 ft. wide, and the Strand, which forms its base, has been widened to an even greater width, thus preserving for all time the two fine Renaissance churches occupying the centre of the Strand. The motives of the Institute in making this plan were manifold. They perceived the architectural objections to making the side view of St. Mary's Church steeple the objective of the street vista as was at one time proposed, and they desired to afford the opportunity for the creation of a new architectural objective worthy of the unique occasion. This can be provided on the island site axial with the new street.

They also foresaw that the traffic from north to south crossing the vast traffic from east to west along the Strand would constitute a serious problem. The new street is therefore designed to enable the northern traffic to ascend by the western arm of the crescent, while the southern traffic descends by the eastern arm. They foresaw that if some such scheme as this were not carried through, a most serious attack would be likely to develop against Waterloo Bridge owing to its inadequate width. This bridge is not only the most beautiful of London bridges, but its position in the centre of the great arc of the river, with the background of Somerset house and the dome of St. Paul's in the far distance, constitutes perhaps one of the finest architectural views in the world. Unfortunately, Waterloo Bridge was designed for a bygone generation, and is much too narrow to carry the traffic of the mail line of communication between North and South London. The solution of this difficulty is thought by the Institute to lie in the construction of a new bridge across the Thames between the Waterloo and the Blackfriars Bridges, and the advantage of the accepted design for the Holborn to Strand street is that the construction of a new bridge to take the southern traffic becomes the almost inevitable corollary to the scheme.

9. *Future London.*—It would not seem that any very useful purpose would be served by indicating the lines upon which future London will develope. It must be largely a matter of conjecture, and though certain improvements are clearly only a matter of time, notably, perhaps, the continuation of the Mall into Trafalgar-square and the consequent widening of Whitehall, yet it is probable that the process in the future will be, as in the past, the outcome of immediate necessity. London still owns very many square miles of dreary squalor and misery, and the conversion of this great area into a beautiful city is, indeed, a Herculean task. Probably many centuries will have passed away before the poverty of London becomes only a matter of history. Still, it is remarkable what rapid strides in the obliteration of the slums are being made. During the last fifty years, whole districts of insanitary property have been swept out of existence and have been replaced by new and healthy dwellings designed with care and thought. There is a public school every few hundred yards, and public baths, gymnasia, libraries, museums, and art galleries are to be found in even the poorest districts. The younger generations are far better equipped than were their fathers to take up the question of civic organisation and to carry forward the movement for better and brighter homes.

Whether London has reached the limit of her population ? Whether this extraordinary city is destined still to enlarge her boundaries ? Whether the growth in power and influence of the great Western world is destined to divert commercial energy into new channels ? These are questions too great for us. It may be that London will be forced to yield her place as the foremost city of the world to her younger and perhaps more energetic competitor New York City. If this be the destiny of fate, I am sure that there is no city to whom London would more willingly yield the pre-eminence, and rejoice in so doing. At the same time it is necessary to state that London possesses vast stores of latent power, that her unrivalled geographical position still remains unchanged, and that, at the beginning of this twentieth century of her history, she is sufficiently confident of her commercial future to embark on schemes of commercial development which will involve an expenditure of hundreds of millions of dollars. Whatever may be the fate that the future has in store for London, however, the past will always remain her own, and I shall be content if this too brief and disconnected sketch succeed in awakening in the mind of the young American citizen some interest, if not some affection, for a city that is after all his *alma mater*.

COMPETITION FOR TECHNICAL SCHOOLS AND FREE LIBRARY, RAMSGATE.

SEVENTY-TWO designs were submitted in this competition. It is idle to bewail the immense amount of more or less wasted labour which has gone to the making of these three or four hundred drawings, but their number seems to show that architects are having "a slack time," or that the designing of technical schools and free libraries is a popular problem. Mr. Henry T. Hare, F.R.I.B.A., has acted as assessor, and has recommended the Council to award the first premium, of 50*l*., to Mr. S. D. Adshead, 46, Great Russell-street, W.C. ; the second, of 25*l*., to Messrs. T. E. Cooper & H. Davis, 11, Gray's Inn-square, W.C. ; and the third, of 15*l*., to Mr. Richard Holt, Liverpool. The designs of Messrs. Woodhouse & Willoughby (Manchester) and Mr. H. V. Ashley (50, Berners-street, W.) have been "commended." All the designs are now on view at "Effingham," Effingham-street, Ramsgate, but the exhibition closes on the 3rd inst.

The first premiated design (No. 58) owes its position to the excellent arrangement of the plans. The eastern portion of the ground floor is devoted to the Free Library, which is very conveniently arranged without any waste space, and in such a manner that the Reference Library, Magazine Room, and Newspaper Room are overlooked from the Lending Library. The Newspaper and Magazine Rooms occupy the whole of the east front. The entrance to the library is in the north front, as required in the instructions, and a square entrance-hall, with one side adjoining part of the News Room, leads to the Lending Library, which also adjoins the News Room, and forms a continuation of the entrance-hall. The Reference Library is in the south front, and is approached through the borrowers' space of the Lending Library. The Assembly Hall of the school is placed near the middle of the block, with its east end against the side of the Lending Library, and both these rooms, being entirely surrounded by other rooms, are top-lighted. The main corridor of the school runs through the building from north to south, and adjoins the west end of the assembly-hall. There are thus two entrances on the north front, one to the library and the other to the school. Between these the porter's room, librarian's room, committee room, headmaster's room, and inquiry office are placed, with a narrow corridor behind forming a connecting link between the two entrance halls. These subsidiary rooms are seven steps above the remainder of the ground floor, and the basement rooms are placed under them. This is an economical arrangement. Along the west front the mechanical drawing room, joiner's shop, and two cloakrooms are placed, and the cookery-room is behind the assembly hall ; all these are entered from the main corridor, as also is the assembly hall. Two staircases adjoin this corridor, one on each side of the assembly hall, and the remainder of the space is occupied by staff conveniences, &c. On the first floor, which is level throughout, the rooms are arranged around the central space above the roofs of the lending library, assembly hall, &c., a corridor forming a complete circuit on the inner side. The three rooms of the Art department, the four classrooms, the physical and chemical laboratories and lecture-room, and the necessary subsidiary rooms, are all conveniently placed on this floor. The caretaker's rooms are in the roof of the central portion of the north front. The plans are certainly the best submitted, but we cannot say as much for the elevations. The style is Georgian of a heavy type, with some coarse detail, such as the heavy stone band in line with the heads of the ground-story windows, and the widely-stepped base of the ventilating turret. The walls are of brick, stone dressings being sparingly introduced. The cubical contents are stated by the author to be 656,100 cubic feet, and the cost, calculated at 5½d. per foot, works out to about 15,250*l*. It may be said in passing that other designs appear to show larger buildings than this, although the contents are said to be less.

Messrs. Cooper & Davis's design is also well planned, although not as thoroughly satisfactory. The reading-room is in the middle of the block and is top lighted, and the assembly hall is along the west front. The joiner's shop and caretaker's house are in the basement. The first floor is of similar type to Mr. Adshead's plan, but the corridor does not make a complete circuit, being stopped by the art school along the east side. The elevations are prettily coloured and show mullioned windows, heavy semicircular pediments over the two entrance bays on the north front, and broken ogee pediments over the two entrances. The west elevation is of simpler character than the north. The cubical contents are said to be 565,022 ft., and the estimated cost at 6¾d. a foot, is 15,889*l*.

The third premiated design also shows a two-storied building with a basement under the back portion. The joiner's shop and caretaker's rooms are in the basement. The news room is in the central portion of the front, the top-lighted lending library being behind it, and the magazine-room and reference library to the east. The assembly hall is in the western portion, and the four classrooms and cloakrooms are on the south side. The headmaster's room and inquiry office are somewhat inconveniently placed between the lending library and assembly hall, and are top-lighted. The elevations are generally satisfactory, although not distinguished ; the alternation of large and small windows on the upper story of the principal front is not a commendable feature. The author states in his report that the contents are 518,663 cubic ft., and allowing 7d. per foot works out the cost to 15,120*l*.

No. 5 by Messrs. Woodhouse & Willoughby is one of the commended designs, but seems at the first glance to be scarcely worthy of this position. The rooms are arranged on three floors, and there is also a basement under one half of the building. The free library and assembly hall, together with two rooms for librarian and committee and two cloakrooms and stairs, occupy the whole of the ground floor. The chemical and physical laboratories, lecture-room, four classrooms, two teachers'-rooms, and inquiry office are on the first floor ; and the art department, mechanical drawing-room, and caretaker's house on the second floor. The cookery-room and joiners' shop are in the basement. The elevations are decidedly commonplace. The contents, 597,227 cubic ft. at 6d., give an estimated cost of 14,930*l*. 13s. 6d.

The other commended design (No. 61, by Mr. Ashley) is interesting, but the central court involves extra cost without compensating advantage. The Free Library is well planned, almost on the same lines as that in the first premiated design, and the school corridor runs through the building from north to south in the same manner. The principal difference on the ground floor is that the assembly hall, instead of being in the middle of the block, is in the centre of the west front. It is almost exactly square, and has a platform in a semi-octagonal apse. The other rooms on the ground floor are two classrooms, two cloakrooms, headmaster's room, and inquiry office. The physical laboratory and joiners' shop are in the basement. The remaining schoolrooms are arranged

on the first floor around a central space, a corridor forming a complete circuit on the inner side. The scullery and pantry of the cookery-room are not well planned, and the school department is too scattered for satisfactory working. The elevations are simple and rather weak, the principal entrances being particularly poor. The main cornice and blocking course are carried at one level around the building, and there are no pediments or other superstructures. The domed apse of the projecting assembly hall, which, by the way, is carried up two stories, makes this portion of the west front look like the east end of a Georgian church wedged between two other buildings. The contents are said to be 558,490 cubic feet and are calculated at prices ranging from 4d. to 7d. per ft., the total estimate being 15,100*l.* Of the remaining designs few are of outstanding merit. Nearly all are cursed with mediocrity. A few are a disgrace to the profession, and may charitably be regarded as the work of pupils in their first year. The worst is No. 62. Among the best are Nos. 6, 7, 13, 29, 32, 33, 47, 57, and 69. We place them in numerical order, not according to merit.

The planning of No. 6 is too diffuse—if the expression may be allowed—but not without merit; there are two areas or courts on the ground floor, one 44 ft. 6 in. by 27 ft. 6 in., and the other 21 ft. by 20 ft. The assembly hall is in the central portion of the ground floor, and is toplighted. There are also four classrooms on this floor; the other teaching rooms are on the first floor, and the school would therefore be easily supervised. Only one staircase is provided, but this is conveniently placed. The first floor has a range of buildings and continuous corridor around the central space as in the first premiated design. The caretaker's house on the ground floor is unnecessarily large. The principal elevation, with large semi-circular arched wineows on the lower story separated by coupled columns rising from the plinth, looks rather like a market, but is a pleasing composition. The contents are said to be 508,623 ft., and are calculated at 6½d. to 13,775*l.*; heating and other extras bring the cost to 15,175*l.*

In No. 10 too much has been sacrificed to symmetry, but the plans and elevations are above the average; the library occupies exactly one half of the ground floor, the other half being given to the school. No. 13 is one of the designs in which the assembly-hall is utilised as a means of communication--not an ideal arrangement. In this plan it is 44 ft. 6 in. square, and forms the only means of communication between the front and back of the school on the ground floor, and the only means of approach to three classrooms. The inquiry office and headmaster's room are conveniently placed on either side of the principal entrance and staircase, but the entrance hall is much too small. There is a continuous corridor around the first floor, the central space being divided into two parts by two rooms for teachers. The library is well arranged, and the plans are adapted for future extension. The elevations are good, with high-pitched roofs, and the cost, at 6d. a foot, is given as 15,500*l.* No. 29 shows a long building, with central longitudinal corridor on the first floor, passing along one side of the assembly hall as a gallery or balcony. The departments are on the whole well disposed, and the elevations are above the average. The contents are said to be 607,629 ft., and the cost 14,758*l.* The ground floor of No. 32 is a straightforward and meritorious piece of work. The library is well arranged, with the three reading-rooms overlooked from the lending library. In the school a corridor runs straight from front to back, having the inquiry office, staircase, and assembly hall on the left, and the physics laboratory, two classrooms, and joiners' shop on the right. The location of the schoolrooms leaves something to be desired, and the elevations might be improved. In No. 47 the elevations are better than the plans, being symmetrically designed in a free but refined type of Renaissance, and well drawn; the plans show some dark corridors and badly-lighted rooms, the rooms being arranged on three floors and in a basement under a portion of the block. No. 57 is an economical design with simple elevations marked by individuality; curb roofs of uncommon outlines are shown, and toplights below the curbs are freely used. Some of the rooms have smaller areas than those specified; for example, two classrooms contain 425 sq. ft. each instead of 528, and are not well proportioned. The classroom in the basement is not in a convenient position. The mechanical drawing room is also in the basement. The first floor is simply planned, but it was a mistake to place a classroom between the painting room and the large art room. The elevations of No. 69 are among the best submitted. The ground-story windows are large and square-headed, set in semicircular arched recesses with brick and stone voussoirs and piers; above these is a mass of plain walling, the upper story being lighted chiefly by top-lights; at each extremity of the principal front there is a well-designed gabled projection, containing in the upper story a large semi-circular window divided by mullions into three lights. The cookery-room is without either scullery or pantry; the entrances to the schools are on the west side; and the chemical department is separated from the physical laboratory by the art-rooms. The contents are said to be 673,367 cubic feet, but the building certainly appears to be smaller than many others whose contents are said to be less.

Passing mention may be made of No. 43, which shows a long and narrow building, with a longitudinal corridor along the middle of the first floor, and which has a dignified exterior. No. 45 is better in elevation than plan; it has three floors and a small basement. No. 31 has three floors and a basement, the latter containing *inter alia* the physics laboratory, cookery-room, and joiners' shop; as the ground floor is entirely devoted to the library and two staircases, the basement rooms are separated by a whole story from the assembly hall and other schoolrooms. No. 56 has a one-storied assembly hall to the west of the main block, which is nearly all three-storied; the plans are lacking in directness. No. 60 is a well-drawn set with good elevations, marred by defects in planning. No. 14 covers a large area; the physics laboratory, joiners' shop, and caretaker's house are in the basement; four classrooms and the mechanical drawing-room are entered from the assembly hall on the ground floor. No. 11 has a frontage of about 230 ft., but the news-room on the east side and the assembly hall on the west are one-storied rooms flanking the central two-storied block; the elevations are simple and not without merit, but the plans show long and badly-lighted corridors, which do not afford good means of communication. One of the classrooms on the first floor would certainly be used as a passage and would be very unsatisfactory as a classroom, having windows on two opposite sides opening into small areas, and doors on the other sides. No. 21 has a central longitudinal corridor on the lower ground floor with an entrance at each end at a higher level, and with the assembly hall, classrooms, &c., adjoining the corridor; the upper ground floor is occupied by the library, staircases, and subsidiary rooms, and the first floor is given to the school; the teaching-rooms are, therefore, inconveniently scattered. No. 26 has a frankly irregular plan, with two blocks forming an obtuse angle; the elevations are quaint and picturesque, the upper story rough-cast, and the planning shows considerable ingenuity, but there are serious defects, such as the location of the cookery-room and joiners' shop. No. 72 shows a free use of mezzanine floors, and the plans have some good points.

Other designs of perhaps equal merit to some of those which have been mentioned need not be particularised. Some competitors have failed to give the accommodation required. A few designs stand condemned by their elevations. Others betray an ignorance of the common rules of planning and of the requirements of buildings of this class. Mr. Hare acted wisely in asking for two elevations only, but even though the work of competitors was thus reduced to a reasonable limit, the amount of wasted labour is enough to make the competing architects sadder if not wiser men.

THE KING'S THEATRE, HAMMERSMITH.—On December 26 was opened the new theatre which has been built in the main road through Hammersmith for Mr. J. B. Mulholland, after plans and designs made by Mr. W. G. R. Sprague. The auditorium is fitted with a sliding roof, and the house contains a reading-room and a ladies' tea-room. There are more than 3 000 seats, the amphitheatre and gallery on the second tier rest upon cantilevers, and the width of the proscenium can be adjusted as may be required.

COMPETITIONS.

TECHNICAL SCHOOLS AND FREE LIBRARY, RAMSGATE.—Seventy-two sets of plans were sent in in this competition, and the assessor, Mr. H. T. Hare, selected the following as the premiated designs:—First, No. 58; second, No. 66; third, No. 70. At a meeting on the 22nd ult. of the Technical Committee, the envelopes containing names and addresses were opened, when it was found that No. 58 was by Mr. S. D. Adshead, 46, Great Russell-street, W.C.; No. 66, Messrs. T. Edwin Cooper and H. Davis, 11, Gray's Inn-square, W.C.; and No. 70, Mr. R. Holt, 45A, Dale-street, Liverpool. Nos. 5 and 61 were commended, and were the designs respectively of Messrs. Woodhouse & Willoughby, King-street, Manchester, and Mr. H. V. Ashley, 50, Berners-street, London.

TECHNICAL SCHOOL, CHORLEY.—The designs for the new Technical School, proposed to be erected by the Chorley Corporation, have been adjudicated upon. Five sets of plans were sent in in competition, and the premiums were awarded as follows:—First, 50*l.*, Mr. Joseph Smith, 24, Richmond-terrace, Blackburn; second, 25*l.*, Messrs. Woodhouse & Willoughby, Manchester; third, 10*l.*, Messrs. Briggs & Wolstenholme, Blackburn.

GOLF CLUBHOUSE, ARBROATH.—The design placed first in this competition was sent in by Mr. Robert Scott, architect, Arbroath. Forty designs were submitted.

SOUTHEND CHURCH COMPETITION.—We had prepared a review of this competition, which was posted by the writer of it, and never reached our office. Consequently we have been obliged, by no fault of our own, to pass it over.

Books.

A Treatise on Surveying. Part II. By REGINALD E. MIDDLETON, M.Inst.C.E., OSBERT CHADWICK, C.M.G., M.Inst.C.E., and COLONEL J. DU T. BOGLE, late R.E. London: E. & F. N. Spon, Ltd. 1902.

THE present volume completes the work of which the first instalment was reviewed in our columns a year or two ago. Although the authors modestly speak of their treatise as a compilation, it must be admitted that the collection and suitable presentation of facts and figures relating to the higher branches of surveying is a task requiring extended knowledge of the subjects involved, as well as the exercise of great discrimination, and a considerable amount of labour. Those departments of surveying which chiefly come within the province of the civil engineer form the subject matter of Part II. In the first chapter some further description is given of such drawing instruments as it is assumed may be unfamiliar to the student. Some of these are of special character, as, for instance, Marquois's scales, supplying the place of the set-square, the straight-edge, and the parallel-ruler; the pantograph and the eidograph, for the reduction of plans; Amsler's planimeter, a most useful instrument for the computation of small areas; the opisometer and the chartometer for measuring the length of winding roads on plans. In dealing with familiar drawing requisites, the authors present three useful hints to the young surveyor: (1) to avoid stretching the paper used for survey sheets, (2) to guard against unequal expansion and contraction by keeping supplies of paper flat in a drawer, and (3) to construct a scale for each survey on each sheet of paper used, so as to avoid errors caused by different expansion of the paper, or of ordinary draughtsman's scales. Chapter II. is practically a continuation of the third chapter of Part I., but it includes references to instruments specially applicable to the operations discussed in the second part. For instance, the adjustment and use of the sextant are described in detail, this appliance being of great value in making surveys of coasts, harbours, and estuaries. The employment of the transit theodolite in astronomical observations is fully discussed, and suitable notice is taken of telemetric instruments, including the tacheometer, the subtense theodolite, and the omnimeter.

Tacheometric surveying, which is the subject of the next chapter, is the science of surveying and levelling simultaneously by means of

angular measurements. Such surveys may be performed by means of any theodolite having a suitable telescope, if subtense wires are provided in its diaphragm, but it is clearly advantageous to employ specially designed instruments in applying tacheometric methods. This chapter is concise and clear, but it is somewhat too brief for the adequate treatment of a subject which is of particular importance to surveyors and engineers practising in foreign countries. Similar comment is applicable to the succeeding chapter on base line measurements, which contains little more than an outline of the methods adopted, and brief mention of the instruments used for the purpose. One useful exception is to be found in the paragraph relating to the measurement of a "broken base," forming two sides of a triangle, from which the length of the third side may be readily calculated. Other exceptions refer to the prolongation of a base by triangulation, over obstacles such as rivers, ravines, or broken ground, and to the calculations necessary when using a supported band for lineal measurements. In a case such as the latter it is necessary to ascertain the change in length due to the tension applied, and to the manner in which the supports are applied. Railway curves form the subject of an interesting chapter, in which the curves in common use are first considered, and methods of "laying out," both on the surface and in tunnels, are described in some detail. Students desiring more complete information are referred by the authors to standard treatises on this special branch of civil engineering.

Up to this point in the work it is observable that the subjects involved are generally explained in short chapters, mainly consisting of brief, though practical, notes. The question of the earth's figure receives more ample treatment, although no attempt is made to give detailed information as to the methods to be followed in those extended and exceptional surveys which necessitate consideration of the spheroidal form of the earth. A useful introduction to the subject is afforded by the chapter on Spherical Trigonometry, a branch of mathematics dealing with the case of triangles situated in three or more planes inclined to each other and passing through one point. Thus a pyramidal space is enclosed, and for the purpose of calculation it is usually assumed that the three intersecting planes are bounded by a spherical surface of unit radius having its centre at the common point of intersection.

Amplifying the explanations given in Part I., the authors now say that the geodetic surface of the earth is one coincident with what would be the mean surface of the sea, if that surface were extended so as to percolate the continents and islands. This imaginary surface is that to which all geodetic measurements are referred, so levels or altitudes are the vertical distances between the geodetic surface and the actual surface of the ground, while geodetic distances are those measured on the geodetic surface itself. Although the authors clearly indicate the geographical effects due to the ellipsoidal figure of the earth, they point out that the difference of length of its two axes is so small that for ordinary purposes the geodetic surface may be treated as if it were that of a perfect sphere. The opportunity is taken in the present volume of making a slight correction in the figures as to the dimensions of the earth, quoted in Part I., on the authority of Rankine. According to more recent calculation it appears that the mean radius is about 1,172 ft. longer than that formerly accepted. The difference of length in feet of the two axes is now stated to be 20,925,867 − 20,854,477 = 71,390. This difference is very small, speaking in a comparative sense, and the ratio is practically as 300 is to 301. Hence, when considering the geodesy of areas not greater than two degrees square, it is unnecessary, as the authors reasonably say, to treat the surface as other than that of a true sphere. Numerical examples are next taken bearing upon the difference between plane and spherical computation, "spherical excess," and the law of convergence of "parallel" straight lines on the surface of the earth, all matters of importance to the surveyor. Chapter VIII. treats of problems in physical astronomy, and is an excellent introduction to practical astronomy, which forms the subject of the succeeding chapter, under the title "Determination of Latitude, Time, and Azimuth." Several extremely useful sections follow, the first, on "Route Surveys and Reconnaissance," by the late General Woodthorpe, C.B., formerly Surveyor-General of India, being especially valuable. Those coming next, on "Plane-Table Topography" and "Sketching," will certainly be found very serviceable to surveyors who desire to qualify for work abroad. Methods of gauging streams and rivers and of preparing engineering plans of harbours, rivers, &c., and some notes on tidal phenomena, form the subjects of the three last chapters of the treatise, these being, of course, specially addressed to the civil engineer. A noticeable feature is the ample appendix, which may almost be described as an auxiliary treatise. The volume which we have briefly reviewed concludes the manual commenced in Part I., and the completed work certainly deserves a high place in technical literature of its kind. One great advantage is that the treatise throughout has been written by men thoroughly qualified by practical as well as by theoretical knowledge of the subjects discussed.

Surveying as Practised by Civil Engineers and Surveyors. By JOHN WHITELAW, Jun., A.M.Inst.C.E. London: Crosby Lockwood & Son. 1902.

THE thought may occur to some that enough works have already been written upon the subject of surveying. There certainly are a good many, but still it appears to us that room exists for the treatise to which we now direct attention. The aim of the author has evidently been to combine in one volume of reasonable dimensions a complete summary of the principles and methods with which engineers and surveyors ought to be familiar, as a guide to the simpler as well as the higher branches of surveying operations. The scope of the work is consequently very wide, and it is practically impossible for any man, and especially a young man, to speak with the authority acquired by personal experience upon every department of work involved. Nevertheless, the author has succeeded in presenting in an acceptable manner the fruits of his own experience, and much useful information derived from the writings of those who have made a study of special classes of surveying work. Commencing with chain surveys, Mr. Whitelaw gives a brief, yet sufficient, description of the instruments required, and explains clearly the methods to be adopted in such work. There seems to be a sort of unwritten law that every writer of a book on surveying must reproduce illustrations of drawing and other instruments from the catalogues of mathematical instrument makers. This is not a good law, and we are sorry to see that it has been followed in the treatise before us. No objection could possibly be offered to a few notes upon the uses of such instruments, but it is quite unnecessary to publish matter that can easily be obtained by writing to one or two well-known makers. Similar criticism is applicable to other chapters of the work, in which perspective drawings of theodolites and various instruments are reproduced. If illustrations are given at all, they should only be such as make clear details of construction or points connected with the adjustment of surveying instruments and appliances. Chapter II., on "Surveying with the Aid of Angular Instruments," is a serviceable contribution, treating of ordinary surveys with the theodolite; traverse surveys, with the compass and with the theodolite; and of surveys with the box sextant, the prismatic compass, the plane table, and the photo-theodolite. Traverse surveys are found particularly useful in districts where the land is so obstructed as to prevent the direct measurement of lines, the compass is also of much use in tropical countries, and the plane table saves much time in the mapping out of topographical details. It will therefore be seen that the author has not forgotten the needs of those who may have to practice in places where work has to be carried out with rapidity, and sometimes without the help afforded by records of previous surveys. As for photographic surveys, the author points out that these may often be conducted in out-of-the-way, dangerous, and inaccessible stations where surveying by any other method would be impracticable. For military purposes the photographic method is especially valuable. Levelling forms the subject of a very interesting chapter, where, in addition to the operations familiar to surveyors in Great Britain, the methods followed in other countries are described in some detail. Railway surveys, tunnel alignment, and surveys for water-supply works receive adequate attention, and tacheometric surveying, a method which on the Continent is supplanting every other system of making preliminary surveys for public works, is accorded a chapter wherein the views of Mr. R. E. Middleton, Mr. Neil Kennedy, and other experts are quoted. After dealing with hydrographical surveys and astronomical observations, the author very properly devotes a chapter to the special and important subject of "Surveys Abroad in Jungle, Dense Forest, and Unmapped Open Country," and here he quotes from Mr. Shelford's well-known paper on "Railway Surveying in Tropical Forests," from a paper on "Surveying in Australia" by Mr. Vickery, and from the regulations of the Australian Survey Departments. A chapter on "Geodetic Surveys," and a series of tables, form the conclusion to this work, which is written with admirable lucidity, and will certainly be found of distinct value both to students and to those engaged in actual practice.

The Design of Simple Roof Trusses in Wood and Steel. By MALVERD A. HOWE, M.Am.Soc.C.E. New York: John Wiley & Sons. London: Chapman & Hall. 1902.

IN his preface the author remarks that very little, if anything, new will be found in this elementary treatise. The object appears to have been to present within a small compass the most salient points connected with the design of various primary forms of roof truss. We believe the want may exist in the United States for such a book, but in our own country this particular department of literature is tolerably well filled by sundry excellent works on the design of simple roof structures. After a brief introduction to the elements of graphic statics, and a short chapter on the strength of materials, the author discusses the design of roofs, both in timber and in steel; the former in some detail, the latter very briefly indeed. In fact, the consideration of steel roof trusses is so brief as to furnish a somewhat slender justification for the mention of this material in the title. All the illustrations are admirably clear, and are so fully lettered and dimensioned as to form a valuable addition to the letterpress. The same remark applies to three folding plates at the end of the book.

Scientific Protection. A Guide to the Proper Application of Lightning Conductors. By ALFRED HANDS, F.R.M.S. London: J. W. Gray & Son. 1902.

THE author's great experience in the erection of lightning conductors has enabled him to write a thoroughly practical guide. He is, perhaps, a little too dogmatic on debateable points. For example:—"No advantage is gained by having the conductor fixed on supports or brackets so as to keep it away from the building. Besides affording a possible means of entry to burglars. . . . it makes it unnecessarily conspicuous. . . ." "A lightning conductor earth plate does not require moisture applied to it like the roots of a plant." We can, however, recommend this pamphlet to all interested in the subject.

Correspondence.

THE QUANTITY SURVEYOR.

SIR,—After an existence of much more than a quarter of a century as a separate profession, is it not desirable that quantity surveyors should be established in some more permanent manner by forming an association to look after their interests?

As it rarely happens that any provincial town contains more than one or two properly qualified practising quantity surveyors, we are compelled to look to London to initiate such an undertaking; but as the interests of provincial quantity surveyors are identical with those of their London confreres, their co-operation should be solicited, and I feel sure it would be cordially acceded to.

Leeds. W. HOFFMAN WOOD.

COATING OF CAST-IRON PIPES.

SIR,—This was the subject of a paper by Mr Humphreys, read at the annual winter meeting of the British Association of Waterworks Engineers, and fully reported in your issue of December 13.

The subject, as Mr. Humphrey remarks, is an apparently minor one, and perhaps I may be able

to throw a ray of light on a rather obscure point, which has very often puzzled every one connected with waterworks and water-pipes. I refer to the tarry taste of the water which frequently occurs after a new main has been laid.

During my connexion with one of the largest pipe foundries in this neighbourhood, more than one complaint of the nature referred to had been received, and it was determined to get to the bottom of it, and, if possible, to find the cause and its remedy, if the same lay within the competency of the foundry. With this end in view, I had a number of short lengths of small pipes cut and coated. When tested, the results were as follows :—

Sample No. 1. — Pipe clean, skin whole, no oxidisation. Removed immediately after coating from the neighbourhood of the dipping pots, but left exposed to the weather.

Sample No. 2.—Same as No. 1, but after being coated it was removed to a place under shelter.

Sample No. 3.—Same, but after being coated was allowed to remain close to the dipping pots, exposed to the fumes rising from the pots.

Sample No. 4.—Same, but after being coated it was allowed to remain for six days close to the dipping pots, and exposed to the fumes. It was thereafter removed, but left exposed to the weather.

Sample No. 5.—Same as No. 4, but after being left exposed to the fumes from the dipping-pots for a week, it was removed to a place under shelter.

At the expiry of three weeks from the time of coating the several samples were collected, their appearance was as follows :—

Sample No. 1.—Brilliant black.

Sample No. 2.—Ditto.

Sample No. 3.—Colour dull black. Coating soft, and adhered to the hands when touched, strongly odorous.

Sample No. 4.—Colour dull black. Coating did not adhere to the hands when touched, smell barely perceptible.

Sample No. 5.—Same as No. 4, but with no perceptible smell.

All the samples were then immersed in separate vessels containing water for one hour, with the following results :—

Sample No. 1.—No taste whatever in the water.

Sample No. 2.— Do. do.

Sample No. 3.—Exceedingly strong tarry taste in the water after the pieces had been immersed for a few minutes. The surface of the water became covered with an oily film.

Sample No. 4.—At first no perceptible taste in the water, but when allowed to remain for half-an-hour strong taste developed and oily film rose to the surface.

Sample No. 5.—Behaved same as No. 4.

From these tests it may be deduced that the fumes arising from dipping-pots will attack any coated pipes in the vicinity, and by absorbing or softening the drying ingredient prevent the coating from becoming hard and dry. When pipes which have been attacked in this way are removed from the neighbourhood of the dipping-pots, the coating dries to a certain extent, but, owing probably to the removal of the drying ingredient, they require a lengthened exposure to the atmosphere before they become fit for use for conveying water, and in any case the coating of pipes attacked in the manner described is probably never so good as that on pipes not so attacked. The appearance of the pipes, after having been exposed to the fumes, is usually of a dull black colour, instead of the bright black varnished appearance which they should possess.

C. C. MACMILLAN, M.I.M.E.

Glasgow, December 23, 1902.

BOOKS RECEIVED.

AUGSBURG : IN KUNSTGESCHICHTLICHTER, BAULICHER, UND HYGIENISCHER BEZIEHUNG. (Reichel ; Augsburg.)

AUGSBURG : EINE SAMMLUNG SEINER HERVORRAGENDSTENDEN BAUDENKMÄLER. Heransgegeben vom Archileklen—und Jugeniene-verein Augsburg. (Kutscher & Gehr ; Augsburg.)

PUBLIC LIGHTING, BY GAS AND ELECTRICITY. By W. J. Dibdin, F.I.C., F.C.S. (The Sanitary Publishing Co.)

STUDENT'S COLUMN.—The usual publication of the "Student's Column" will be commenced in our next issue.

CHOIR STALLS, BARNET CHURCH.—A set of choir stalls, fitted with screen work at the back, has been placed in this church. The stalls, erected on the north and south sides of the chancel, are of the fourteenth century decorative style. There are six stalls on either side for the adult members of the choir, and the ends are carved and surmounted by figures of angels holding musical instruments. There is a canopy over each set. The boys' stalls are treated in the same style. On each of the front panels is a carved figure of a boy chorister, and these figures are represented as joining in singing. The stalls are supplemented by two new prayer desks, which are carved and ornamented. The decorations include symbolical figures of the four Saints—Matthew, Mark, Luke, and John. Mr. J. C. Traylen, Stamford, was the architect, and the work was executed by Messrs. J. Thompson & Co, Peterborough.

GENERAL BUILDING NEWS.

EXETER CATHEDRAL.—The west front of Exeter Cathedral, which for centuries has been gradually forced outward by the weight of the roof, has been found insecure, and the Dean and Chapter have decided on its renovation. Every precaution against vandalism or unnecessary disturbance of fabric will be taken, it is stated.

RESTORATION OF BOURNE ABBEY CHURCH.—The reopening of the Abbey church at Bourne after the completion of a further portion of the restoration work took place recently. Within the last ten years the whole of the Abbey church has been practically restored, the work having been carried out in sections. The last section consists of a new roof on the south aisle, and the complete restoration of the south porch; the doorway to the old vestry-room has been replaced with a new window, as it was when the church was originally built. The work has been carried out by Messrs. Roberts Bros., of Stamford, at a cost of 500*l*, under the direction of Mr. J. C. Traylen, architect, of Stamford.

DRILL HALL, PONTYPOOL.—A new drill hall, which is to be the future headquarters of the 3rd Volunteer Battalion of the South Wales Borderers, was opened at Pontypool on the 22nd ult. The new drill hall is situate at the top of Osborne-road, and midway between Pontypool and Pontnewynydd. It has a frontage facing the main road of about 92 ft. and a depth of 48 ft. It comprises a central hall, 75 ft. by 45 ft., with officers' rooms, lavatories for officers and men, and a basement room suitable for storage purposes. At the rear space is reserved for a Morris tube range. The outside walls are of red facing bricks, relieved by string courses and bands of buff facing bricks and dressings of Bath and Forest stone. The roofs are slated on the outside with blue slates. Inside the roofs are of wood, with match-boarding up to the apex of the hall The hall floor is made of wood blocks, while the rooms are boarded, and the remaining parts laid in granolithic. Ventilation is provided on the Boyle system, and the lighting is to be done by gas. The structure is approached from the main street by a flight of nine steps. There is also a porch 8 ft. wide leading into the main hall, iron gates being provided on the outside. The contractors were Messrs. Morgan & Evans, of Pontnewynydd ; and the architect, Mr. D. J. Lougher, of Pontypool.

THEATRE ROYAL, BATH.—The Theatre Royal, Bath, has been altered and reopened. Messrs. Hayward & Wooster were the contractors, and the architect was Mr. F. T. Verity, London.

U.F. CHURCH, CLELAND, LANARKSHIRE.—The memorial stone has just been laid of the new United Free Church at Cleland. The building, the estimated cost of which is 2,000*l*, is situated in Church-street on the site of the old one. It is built of white sandstone, and has a steeple on the right side of the façade. It is provided with an end gallery, and gives accommodation for 460. It has five windows on each side, and a three-light window in the front gable. In the rear of the church there is a hall, seated for about 150. The building is from plans by Mr. James Shaw, Coatbridge.

THE REBUILDING OF THE LADY-CHAPEL AT HEXHAM.—The rebuilding of the lady-chapel at Hexham necessarily involves the taking down of the present east end of the Abbey, which was built in 1859 by Mr. W. B. Beaumont. Some dissatisfaction exists in Hexham at the proposed alteration at the east end of the church, and a strongly worded petition of protest is being signed, to be addressed to Mr. Beaumont, lay rector and patron of the living, asking for his interference in the matter. It is proposed to rebuild the lady-chapel (the cost, over 10,000*l*., being borne by Mr. James Hall, of Dilston and Tynemouth), from plans by Mr. Temple Moore, architect.—*Newcastle Journal.*

A NEW DOCK AT SWANSEA.—Mr. A. O. Schenck, Engineer to the Harbour Trustees, and Mr. P. W. Meik, of Messrs. P. W. & C. S. Meik, of Westminster, are appointed engineers for the construction of a new dock at Swansea, with a lock large enough to meet the latest requirements, at a computed outlay of nearly 2,000,000*l*.

SNOW HILL RAILWAY STATION, BIRMINGHAM.—It is stated that an estimated sum of upwards of 300,000*l*. will be expended upon the proposed enlargement and improvement of the station at Snow Hill, with an increased accommodation for local traffic, to comprise new bay lines and platforms on the Wolverhampton side. The scheme has been formulated by Mr. J C. Inglis, chief engineer to the Great Western Railway Company.

ISOLATION HOSPITAL FOR NORTH MIDDLESEX.—On December 23 was opened by the Hendon Rural Council a new permanent hospital for diphtheria and scarlet fever for patients from the area of Edgware, Stanmore, and Pinner. The buildings have been erected from designs by Mr. J. A. Webb, Engineer to the Council, at a cost of 7,500*l*., for fourteen beds, and comprise an administrative block, laundry, nurses' quarters, and other departments.

FISH MARKET, BARROW.—A new fish market was opened at Barrow on the 24th ult. The building stands between the Market Hall and the Town Hall, and is 46 ft. in length by 26 ft. wide. Askam bricks and Morley stone dressings have been used, and the roof is covered with Tilberthwaite green slates. Internally the walls are lined with glazed bricks. The roof lining is of pitch pine, and it is supported by steel principals, and a large turret ventilator is fixed at the apex in the centre of the building. The floor is laid with black and white tiles on a concrete bed. The work has been carried out from the plans and under the supervision of the Borough Surveyor and Engineer, Mr. J. Walker Smith.

BUILDING IN NEWCASTLE.—After a period of comparative quietude, largely owing to disputes in the trade, the past twelve months have seen a general and remarkable outbreak of activity in all sections of building in Newcastle. Not only has the development of estates on the outskirts of the city—at Benwell, Heaton, and Jesmond more particularly—proceeded apace, but the heart of the city has been and is the scene of very numerous schemes of reconstruction, probably on a bigger scale than has been recorded in Newcastle for a great number of years. Whole blocks of business and other premises have been rased to the ground to allow of the more advantageous use of the sites which, being central, are increasingly valuable. The completion of a splendid pile of offices in Dean-street, at the rear of the cathedral, was scarcely effected before a start was made with a considerably greater enterprise, covering all the land on the south side of the new buildings, and extending back to the Side, this reconstruction scheme involving the destruction of more than one house of historic interest. Bewick's workshop was one of the first places to go in connexion with this project, whilst at the head of the Side the birthplace of Lord Collingwood has also disappeared. The railway works at New Bridge-street, in connexion with the through route between the old Blyth and Tyne line and the main route to the Central, at the Manors, are making substantial headway, and involve the construction of a new bridge of some length for the traffic now diverted to a temporary road. At the junction of Northumberland-street with New Bridge-street a fairly extensive scheme is in hand for the erection of a suite of offices for the Pearl Insurance Company. On the Castle Leazes, after a spell of little progress, work on the Royal Infirmary is proceeding apace, and should the open weather of the winter continue, excellent headway is likely to be made. The block of buildings in Collingwood-street, erected for the ex-Sheriff (Councillor W. J. Sanderson), is now practically completed, and the various shops and offices are being rapidly occupied. The Western portion has been purchased by Messrs. Barclay & Co., for use as banking premises. The eastern portion of the ground floor is divided into five shops, and the upper floors into suites of offices. Altogether, there are well on for 100 offices, some being subdivided to meet the requirements of certain tenants. The main entrance is situate in the middle of the Collingwood-street front, and gives access to a well-lighted large octagonal hall, the walls of which are lined with marble, and the floor is laid with ceramic mosaic. Immediately fronting the entrance is a marble staircase, but passenger lifts have been fitted up on either side. The architects for the buildings were Messrs. Oliver, Leeson, & Wood, of Newcastle, and the chief contractor was Mr. Alex. Pringle, of Gateshead. Immediately opposite this block of buildings, there has been demolished the establishment occupied by Mr. Pape, and foundations are being put in of new offices for the Sun Fire Insurance Co. This building will have a double front, the main façade being in Westgate-road, opposite the Lit. and Phil. The lower part of the premises will be of grey granite, and the superstructure of stone. The building will comprise six floors. Messrs. Oliver, Leeson, & Wood are the architects, and Messrs. J. & W. Lowry the contractors. The old hostelry known as the Royal Exchange Hotel, with the shops lately occupied by Messrs. Kilgour & Liddell and Messrs. Bright & Co., in Grey-street, Newcastle, and extending from Grey-street to the Church Institute, with frontages to Grey-street, Hood-street, and High Friar-street, are being rapidly demolished, and on their site it is intended to erect business premises, comprising four shops or offices on the ground floor, with show or unpacking rooms and goods entrance at the rear, and on the upper floors several suites of offices, consisting of about eighty chambers, accessible from a spacious entrance-hall, opening on to a stone staircase, in the well of which is arranged a passenger lift. The basement extends over the whole area of the site. The architects are Mr. W. H. Knowles, Newcastle, and Messrs. W. & T. R. Milburn, of Sunderland, and the contractors Messrs. J. & W. Lowry, of the former city. Tenders have been obtained, and it is intended shortly to begin the erection of business premises in Carliol-street for Messrs. Browne & Browne. The accommodation includes a semi-basement, good shops, and offices or showrooms above, the uppermost story being arranged as a photographer's studio. The elevations will be of best red brick, and the roof covered with green Westmorland slates. The constructional lines of the angle door are continued to the roof and terminate in a turret, and the windows of the upper floor are arranged in the gables, which thus break the eaves and ridge

line. The buildings have been designed by Mr. W. H. Knowles. About two years ago the Academy of Arts, Blackett-street, was purchased by Mr. C. W. Mitchell, with the view of converting it into an art centre. This work has now been accomplished. The old Classic front elevation has been practically untampered with, the only alteration being the insertion of a modern shop front in the western portion. Internally the place has been altered, the first floor converted into premises for the Pen and Palette Club, the upper floor into caretaker's rooms and studios, and on the ground floor the art gallery has been rearranged and redecorated. The architects were Messrs. Oliver, Leeson, & Wood. Considerable progress has been made with the development of the West Jesmond Estate, and in the course of another twelve months it is expected that the work will be completed. Some 800 houses have been erected during the last six or seven years. A site has been secured for a Roman Catholic church, and a temporary iron building is now in course of erection on the site. The portion of the Benwell Grove Estate adjoining the West Turnpike is now practically all built upon, and the lower portion will shortly be laid out into building sites for some 300 more houses. The architect for both these estates is Mr. C. S. Errington, of Newcastle and Benwell.—*Newcastle Journal.*

LIBERAL CLUB, PERTH.—A new club is to be erected by the Perth Liberals in Kinnaull-street at an estimated cost of 8,000*l.* The architects are Messrs. M'Laren & MacKay, Perth.

BUILDING TRADE OF LEITH IN 1902.—In the report on the building trade in Leith during 1902, issued from the Burgh Surveyor's Office, it is stated that the year has been marked by a great want of briskness, and that the outlook for the coming year is not encouraging. A total of seventy-six warrants to build was granted by the Dean of Guild Courts—the majority being for alterations on or small additions to existing property. Eleven of these warrants were for shops and tenements, and included nine shops and 251 dwelling-houses, and five warrants were granted for villas and self-contained houses, the plans showing accommodation for 107 tenants. New tenement property, it is stated, is rapidly taken up, showing that there is still a great demand for this class of house, and from the way in which self-contained houses are occupied, there seems to be a field for further operations of this nature. Seven warrants for warehouses, stores, &c., were granted. The new church of St. Serf's in Ferry-road is rapidly being completed, as is also the new Masonic Lodge at Wardie-road, and plans have been passed for a large new school in the Kirkgate in connexion with the Roman Catholic Church there. Satisfactory progress is being made with the new Bonnington Bridge, the foundations and wing wall of which have been almost completed. It is expected that many months will elapse before the Caledonian and North British Railway Company's new stations are opened to the public, as the work is proceeding slowly. In regard to the Town Hall alterations, the new committee-rooms and offices are practically completed, and it is expected that these will be formally opened early in January.

PROPOSED NEW SECONDARY SCHOOL FOR HAWICK.—At a meeting of the Hawick Burgh School Board on the 23rd ult. Mr. J. P. Alison, architect, in compliance with a request from the Board, submitted a plan and estimate for utilising the vacant ground behind the Buccleuch Memorial for a new secondary school in conjunction with the accommodation already utilised in the Memorial. He estimated the cost of the new part, &c., at 2,600*l.* Mr. Melrose said this would give accommodation for 218 pupils altogether, there being at present 140 in the present academy. He suggested that they should adopt Mr. Alison's report, and submit the plan for the Department's approval before proceeding further. On the motion of Mr. Hall, it was resolved to confer with Mr. King, H.M. Inspector, before bringing the matter before the Department.

BUILDING IN BIRMINGHAM.—Although the area embraced within the boundaries of Birmingham remains the same, the size of the city in population and in the number of its dwelling-houses and business premises increases every year. During the past twelve months far more progress has been made in this direction than in the year preceding. Probably 1,700 or 1,800 small houses have been erected and let at rents ranging from 6*s.* to 10*s.* a week. These houses are situated mainly at Small Heath, Bordesley Green, and Saltley, the side of the city which contains the most vacant land, and where, consequently, sites are being extensively acquired and laid out for building purposes. Building is still going on in the neighbourhoods mentioned, and the builders, as a matter of fact, cannot put up the houses fast enough. Besides these artisans' dwellings more than a hundred large workshops, factories, and business premises have been erected since the commencement of the year—establishments at each of which at least a hundred workpeople will find employment—and, in addition, a much larger number of smaller buildings have been put up, while the extensions and additions to existing buildings are innumerable. One matter of interest to the inhabitants of Bordesley Ward is the erection of the bridge to connect Small Heath with Sparkbrook. Considerable progress is being made with the University buildings in University-road, in the parish of Harborne, but not far from Bristol-road. The power station is nearly finished, and the foundations for two of the main blocks are partially completed. The building which has been erected in Balden-road, Harborne, by the Committee of the Gem-street Industrial School, is finished, and the inconvenient, incommodious, and old-fashioned school in Gem-street will now be made available for the purposes of a day and industrial school under the Birmingham School Board. The suite of Baths in Green-lane was built and opened this year for the benefit of the inhabitants of Small Heath, and a new fire station has been erected and fitted up on modern principles at the corner of Saltley-road and Lingard-street. One new church has been built during the year, namely, St. Peter's, in George-street West, to replace the church in Dale End, which was sold under the Birmingham Churches' Act, and the site of which has been acquired for the erection of a new home for the Young Men's Christian Association. The Bordesley Green Board schools have been finished and opened, and the Loxton-street Board schools have been materially enlarged. Considerable extensions have been made to the gas works at Saltley, and in close proximity thereto, in Nechell's Park-road, the Corporation have erected houses for a superintendent and a foreman. In the centre of the city the operations of the builder have been less extensive than usual. Corporation-street was practically completed, and the only important feature of the work under the City's Improvement Scheme is the erection of the Wesleyan Methodist Central Hall, opposite the Victoria Courts. This building is rapidly approaching completion. Another building is in course of erection for the Wesleyan General Assurance Company at the top of Steelhouse-lane; in the Upper Priory a block of offices on modern principles has replaced a number of small tenements, and extensions have been made to the Homœopathic Hospital in Easy-row. In Paradise-street, Queen's College is in process of reconstruction. The remaining leases of the shops in Christ Church-buildings, at the top of New-street, fell in in the early part of the year, and a block of new shops has been erected, which mark a considerable improvement in the neighbourhood of Victoria-square. The Midland Hotel in New-street is nearly finished. The old elevation in the main thoroughfare has been maintained, but there is a new one in Stephenson-street, and the internal portion of the structure will be wholly new. The new arcades which open into New-street have been finished, and the extension of the Vegetable Market in Jamaica-row, it is expected, will be completed in the spring. Of the private establishments there have been many new houses of considerable size erected in Edgbaston during the year, while the extensions and reconstructions of existing residencies are far greater in number. Messrs. Southall Brothers & Barclay have largely increased the size of their manufacturing premises in Alum Rock-road, the Wolseley Tool and Motor Car Company have made extensive alterations to their works in Arden-road, and the Metropolitan Railway Carriage and Wagon Company have launched out in a similar manner. The Birmingham Small Arms Company have built additions to their already big establishment in Armoury-road, Small Heath, alterations and extensions have been made at the Mint in Icknield-street, and new factories have been erected in Constitution Hill for Messrs. Barker Brothers, and in Caroline-street for Messrs. Barker & Allen. It will be evident, therefore, that during the year Birmingham's growth in "bricks and mortar" has been very considerable.—*Birmingham Post.*

ABERDEEN UNIVERSITY EXTENSION SCHEME.—The plans of the frontage of the University, as finally decided upon by the Sites and Plans Committee, have now been completed by Mr. A. Marshall Mackenzie, A.R.A. The new plan differs from that which was issued in November, 1901. That plan showed two entrances—one close to the north tower and in line with the north side of the quadrangle, and the other in line with the south side of the quadrangle. In the amended plan there is only one entrance, opposite to the entrance to the Mitchell Hall and tower. In the new plan there is less richness in the architectural features by the removal of central mullions from the windows, but the general character of the scheme has been retained, and it is very effective. Provision is made in the new building for the departments of Geology, Natural History, Law, Modern Languages, Education, Comparative Psychology, and Agriculture. There will also be accommodation for the library in the portion to the left of the entrance.—*Aberdeen Journal.*

BANK, THIRSK.—The York City and County Bank, Thirsk, has been enlarged. The exterior has been designed to conform as much as possible to the original building, and has now a continuous frontage of 59 ft. The bank entrance is emphasised by a carved shield containing the monogram of the company. At a lower level is placed a clock. A new entrance has been provided to the manager's private rooms. The interior of the ground floor is occupied principally with a banking room, 30 ft. by 25 ft., a manager's private room, and a fireproof safe. The whole of the woodwork on this floor is in polished mahogany. The floor in front of the counter is executed in marble mosaic on concrete laid between rolled steel joists. The ceiling is panelled. Leaded lights have been used to the vestibule screen and in the lower portions of the large windows in the form of panels containing the name of the company. In the basement provision has been made for a steel-lined fireproof strong-room, 15 ft. long and 8 ft. wide. The upper floors provide additional accommodation for the bank manager. The following contractors were employed: Mr. J. W. Rudd, joiner's and cabinet-maker's work; Mr. T. Godfrey, masonry; Mr. T. Cartman, plumbing and leaded lights; Messrs. J. & W. Baynes, slating; Mr. Bickers, Thirsk, painting and polishing; Mr. Shaw, plastering and concreting; Mr. Falshaw, electrical and gas fittings. The work has been carried out from the plans of Mr. T. E. Marshall, architect, Harrogate.

TOWN HALL, STANHOPE.—The new town hall at Stanhope has just been opened. The architects were Messrs. Clarke & Moscrop, and the builders, Messrs. Hopper & Wharton. The ground story of the building contains council chamber, caretaker's house, and a cottage let off to a tenant. The total cost will be about 3,000*l.*

MISCELLANEOUS.

INSTITUTE OF BRITISH DECORATORS.—Sir William B. Richmond, R.A., has promised that towards the end of February he will deliver to the Institute of British Decorators, at Painters' Hall, a lecture giving some account of his great decorative work in St. Paul's Cathedral.

THE ROYAL SANATORIUM FOR TUBERCULOSIS.—The Advisory Committee have selected Mr. H. Percy Adams as the architect to carry out the King Edward VII. Sanatorium.

STABLES, WOBURN ABBEY.—The fine range of stables at Woburn Abbey, well known to visitors, which were somewhat antiquated in their fittings and arrangements, have just been refitted and modernised. Many of the old stalls have been removed and in their place new loose-boxes of ample dimensions have been substituted, with massive iron and brass fittings. The walls have been lined with boarding and green tiles, and the old paving has been removed and adamantine clinkers laid instead. The three stables have by slight structural alterations been thrown into one. The whole of the work has been carried out by the St. Pancras Ironwork Co., under the superintendence of Mr. G. E. Whitcombe, acting for the Duke of Bedford.

CHAIR OF ARCHITECTURE, MANCHESTER TECHNICAL SCHOOL.—At a meeting of the Technical Instruction Committee of the Manchester Corporation, on the 22nd ult., the arrangements were confirmed for the establishment of a Chair of Architecture at the School of Technology, under the joint auspices of the Owens College and the Corporation Committee, with the co-operation of the Manchester Society of Architects. It was reported that there were 2,900 acceptances to attend the first annual conference on January 2 and 3 (to be held at the Technical School) of persons in the North of England concerned in primary, secondary, and other forms of higher education.

NEW NAVAL BARRACKS, CHATHAM.—The new naval barracks are nearly completed. They have been built on the sites of the old convict prison and torpedo factory, and will cost, it is calculated, about 240,000*l.* The quarters for officers and seamen are planned in blocks. The infirmary and the Commandant's house will be shortly proceeded with upon further contracts.

BRISTOL, LONDON, AND SOUTHERN COUNTIES RAILWAY.—A projected line, for which powers will be sought in the course of next Session, is planned to run from Bristol to Bath, thence through mid-Wiltshire to a junction with the Midland and South-Western Junction Railway at Collingbourne, near Ludgershall, and thence through north-west Hampshire to a junction with the London and South-Western Railway at Overton, between Whitchurch and Basingstoke, with branches to the Midland Railway at Kelston, in Somersetshire, to the Somerset and Dorset Railway at Midford, and to Avonmouth. The promoters will apply for running powers over the several railways we mention.

PROPOSED CITY AND CRYSTAL PALACE RAILWAY.—The new railway, for which a Bill has been prepared, provides for the construction of a line from the intersection of Queen and Cannon streets to Rye-lane, Peckham, and thence to the western side of Crystal Palace Park-road at a point near the Penge entrance into the Palace grounds. Two alternative sites for a generating station are named in the Bill—one by the side of the Peckham branch of the Surrey Canal in Hill-street, the other at Bankside, between Rose-alley and Bear-gardens, Southwark. The promoters of the undertaking seek to take the subsoil, or an easement of about 3 roods, of the northern portion of Peckham Rye Common.

ORDNANCE SURVEY MAPS.—The Comptroller of the Stationery Office has informed the Surveyors' Institution that he will not in future require special application to be made to him for sanction to print an extract from any Ordnance Survey map for the purpose of particulars of sale of land, if the following conditions are observed:—"1. That the source

from which any reproduction is taken is duly acknowledged on the face of each copy in the following terms:—'Reproduced from the Ordnance Survey map with the sanction of the Comptroller of H.M. Stationery Office.' 2. That the map as reproduced is not placed on sale, but is only used for the purpose of particulars of land sales. 3. That a copy of the map as reproduced is in every case forwarded to the Director-General, Ordnance Survey, Southampton, and that another copy will, if demanded, be forwarded to the Board of Agriculture, 4, Whitehall-place, London, S.W."

PROPOSED SULPHUR BATHS, RIPON.—The question of the erection of these baths came before the Ripon City Council recently, when Alderman Wells reported that the idea of a public competition for plans had been abandoned, as the estimated cost (117*l.*) was thought to be too large for an outlay of 5,000*l.* It had been urged that the City Engineer (Mr. Thorp) was competent to prepare the necessary plans, but Alderman Wells, without reflecting on that official's ability, thought that he would have enough to occupy his attention for some months in the sanitary and highways departments. There had been further interviews with Mr. Stead, ex-borough surveyor of Harrogate, who was in attendance to give the Council any further particulars.—Mr. Walker objected to the opinion of one man being taken where the sum of 5,000*l.* was involved, and he moved that the subject be considered in committee.—Mr. Wilkinson protested against the City Engineer being ignored, and urged that, failing him, there should have been a public competition. The Council went into Committee, and after a long discussion, resolved, by seven votes to three, to ask Mr. Stead to submit sketch plans of baths to the Council before any further action was taken.—*Yorkshire Observer.*

PROPOSED NEW HOUSING SCHEME FOR SOUTHAMPTON.—Mr. C. J. Hair has submitted to the Housing Committee of the Southampton Corporation another scheme for the development of the area north of Simnel-street. The plans provide for sixty-two three-room cottages, and four four-room cottages, giving accommodation for 404 persons. The rents are estimated at 7*s.* 9*d.* per week for four-room cottages, and 5*s.* 9*d.* to 6*s.* for three-room cottages. Mr. Hair estimates that the scheme will cost 11,400*l.*, embracing 10,655*l.* for cost of buildings, 532*l.* 15*s.* architect's fees and expenses, and 200*l.* clerk of works. The Housing Committee have approved of the plans, and have decided to recommend the Council to make application to the Local Government Board for sanction to borrow 12,500*l.* to carry out the scheme. The Council are to be requested to engage Mr. Hair as architect.

PAST AND PRESENT BUILDINGS.—In connexion with the Aberdeen Granite Trade Educational Lectures a paper on "Buildings: Past and Present" was delivered by Mr. Wm. Kelly, architect, in the Trades Hall on the 23rd ult. Mr. Kelly said he thought the chief sin of modern buildings was their dulness and lack of being able to interest. This was to a great extent accounted for by the fact that the architect worked and thought on paper and not with solid materials, and it was only when too late, when the building was created, that the blunders were seen and acknowledged. The true artist must think in material. In Europe they were absolutely without a perfect living style, and the architect of this century was supposed to be able to work and know the styles of all ages. The absurdity underlying an attempt to revive or copy styles might find relief in laughter if they dared, but there was no laughter in it. There was no doubt the artist of the Middle Ages was a freer agent. He could not have been the artist he was under any other condition, and such freedom could not exist except in the growth of a style or in the rules of well-known traditions, the conventions of which were perfectly understood by architects and craftsmen. The man of recent times who had done more than any other to cultivate a growing style was William Morris, who gathered around him a band of workers willing to co-operate, and to-day they were reaping the benefit of what he had written and done. But as he had said, the fault of present-day buildings was their dulness and lack of interest. No interest was taken in the work, and the people who executed the work did not interest themselves in it. This showed clearly that if they wanted to do good work nowadays personal interest must be taken in the constructions, otherwise it was of no use. Turning to the buildings of olden times, Mr. Kelly pointed out the great difference in the ideas of the builders compared with the present time. To know old work, he said, was to love it, and in some of the old buildings one could fancy almost seeing the designer. First, he traced the buildings of Spain, then of Italy, and of the middle ages in Britain. He described some of the stately old buildings, of perfect design and construction, to be found in these countries, and pointed out that it was manifest that the builders were not priests but laymen; that all the grades of them were members of a guild trade, including masons, wrights, and artists. The members of the guild did everything required to design and carry out the building work. He showed numerous instances in which the master bound himself for his whole lifetime to the work, and how the architects themselves worked on the buildings as masons or carvers. They lived on the work, and watched its progress, and in other cases they were under obligation to visit the building so many times each year, spending weeks at a time in seeing what was being done. They found abroad and at home that the mediæval artists were masons, and in Italy that the masons and sculptors sprang from the guild of the trade, and that the descendants of these men were the great artists whose names were known by all cultured people throughout the country. Particularly they saw how the different branches threw their personal influence into the work, and made it felt. This was the secret of the beautiful and handsome buildings of olden times. In concluding, Mr. Kelly touched on the older works in the district, the castles of Aberdeenshire, the St. Nicholas Church, and St. Mary's chapel. He pointed out the peculiarities of these erections, and the great lessons they taught to present day workers. He showed the connexion French had with the buildings carried on by Alexander Galloway and Bishop Dunbar, explaining the magnificence and solidity of the Bridge of Dee.

THE INSTITUTION OF GAS ENGINEERS.—We are informed that the Incorporated Gas Institute and the Incorporated Institution of Gas Engineers have been dissolved, for the purpose of forming a united Society under the name of the Institution of Gas Engineers. The Institution has been duly registered, the offices being at 39, Victoria-street, Westminster. Mr. Walter Dunn is the Secretary.

NEW CLOCK, CAWOOD CHURCH, SELBY.—A new chime clock has been presented to this parish church. The old clock, removed from Cawood Church to make room for the new one, came from Selby Abbey sixty years ago, where Messrs. Potts & Sons, the makers, are also making a clock for the tower of the old abbey.

NEW CLOCK, DERSINGHAM (SANDRINGHAM).—On the 20th ult. the Prince of Wales formally set in motion a large chiming clock which had been erected in the Parish Church of Dersingham in commemoration of the King's Coronation. The clock and chimes were made by Messrs. John Smith & Sons, Derby, to the general designs of Lord Grimthorpe.

PICTORIAL TREATMENT OF ARCHITECTURE.—The subject of "The Pictorial Treatment of Architecture" was the theme of a lecture by Mr. Walter Scutt before the Newcastle-on-Tyne and Northern Counties Photographic Association on the 16th ult. The lecturer drew a distinction between pictorial treatment and the mere simple record of facts, there being, as a rule, nothing artistic in the latter, and remarked that most architectural photographs suffer from the attempt to include too much in the field of view, and show too much detail, thus losing breadth of effect and concentration of interest; pictorial effect depending upon certain qualities not inherent in the building itself, hence a pure technical reproduction of the work of the architect and mason is not necessarily or generally a picture, or pleasing to the cultivated taste. Mr. Scutt said that scattered lights and shades were to be avoided, while massing of the same was to be preferred. Wide-angle lenses and small stops were undesirable, causing violent perspective and loss of atmosphere, while suitable figures should be introduced whenever possible. Some slides by the lecturer were put through the lantern, illustrating his remarks very aptly, and reproductions of pictorial treatment of architecture by famous artists, in particular Turner and Girtin, were handed round. In conclusion, Mr. Scutt recommended the use of orthochromatic plates or films, single lenses to obtain softness, and cameras with fixed backs and great range of rising and swing fronts over those with swing backs and limited rise of fronts.—*Photographic News.*

SEA WALL, DUNDEE HARBOUR.—The new river wall which Dundee Harbour Board propose to have erected is estimated by Mr. John Thompson, jun., the Harbour Engineer, to cost 166,149*l.* 8*s.* His idea is that the work should be undertaken in sections, beginning at the east end. From calculations which Mr. Thompson had made, this section, which would embrace the Cattle Wharf, and extend to about 400 ft., would cost 46,381*l.* 6*s.*, and that four years would be required to complete the work, making an annual expenditure of about 11,600*l.*

LEGAL.

DRAINAGE OF PREMISES.

AT the South-Western Police-court recently, Mr. A. C. Ballard was summoned in respect to some default in the drainage of premises in Madeira-road, Streatham, of which he is the landlord. Mr. W. W. Young supported the summons on behalf of the complainants, the Wandsworth Borough Council. It appeared that Mr. Kent, the tenant of the house, wrote to the defendant complaining of objectionable odours pervading his drawing and dining rooms. His remonstrances met, so it was alleged, with little response. His family were ill with ulcerated sore throats, and finally he had to leave the house. The occupier of the adjoining house also left, fearing the consequences of the smells next door. Some attempt had since been made to place the drains in order, but, Mr. Young said, there were other defects that required immediate attention. Mr. H. J. Martin, the Borough Surveyor, described in detail the sanitary arrangements of the house. While admitting that several of the defects had been remedied, he said that others existed. The magistrate, becoming impatient at the length of the inquiry, said the case would proceed at the defendant's own peril. The occupants of the house, and, indeed, the neighbourhood, were being poisoned by the delay. After more time had been occupied in investigating the facts, the magistrate granted an order for the abatement of the nuisance complained of within three weeks, the defendant having through his solicitor expressed his readiness to undertake the necessary works. Mr. Young applied for substantial costs, on the ground that the defendant had acted in the most obstinate, he would almost say disgraceful, manner. Mr. Ballard (interposing).—It is not true. I have spent hundreds. The magistrate said the defendant's conduct had been, to say the least, obstructive; he had not done his duty. The magistrate ordered him to pay twenty guineas costs. Notice of appeal was given. —*Times.*

PATENTS OF THE WEEK.

APPLICATIONS PUBLISHED.*

22,268 of 1902.—G. W. HERDMAN: Hinges or Fastening Devices for Jointing together parts of Levelling Staves and other Articles, and for holding the same in the Open Position.

For jointing together two parts of a staff a hinge or fastening device is provided, comprising two main parts jointed together, and adapted to be secured to the adjacent parts of the staff, which are designed to overlap one another, one of such main parts being adapted to bear against one surface of one part of the staff, and provided with adjustable clamping means adapted to bear against the opposite surface of the said part of the staff, and the other main part being adapted to bear against one surface of the second part of the staff, and provided with inclined bearing surfaces, against which a movable clamping device, carried by the overlapping portion of the first-mentioned part of the staff, can be caused to bear when the two parts of the staff are opened out, and to thereby clamp or lock the two parts of the staff in the open position.

21,952 of 1901.—D. HONEYWOOD: Machinery for Crushing or Grinding Ore, Rock, Cement, and the like.

This relates to a crushing or grinding machine, consisting of two crusher-heads or stamps forced to reciprocate horizontally towards and away from one another by means of compressed air or other fluid acting upon pistons on the rods or shafts of such crusher-heads or stamps and admitted into the driving-cylinders through suitable ports and valves from the compression cylinders, the pistons of which are actuated simultaneously by means of levers and links; the ore or other materials to be treated being introduced into a containing-box with a grating or screen.

25,505 of 1901.—R. STANLEY: Manufacture of Tiles, Quarries, or other like Pressed Articles.

This relates to a press, and consists in the combination of a feed-box and means for assisting by compressed air, steam, or other gas, the fall of the material therefrom into the die chambers at the required time.

25,816 of 1901.—W. T. EADES: Safety Hoists.

This relates to a power driving gear for double lift hoists, consisting of a pair of friction cones or rollers made fast to a sliding or shifting shaft sleeve or equivalent adapted to be driven by power, the said cones or rollers being disposed respectively on the opposite sides by a friction wheel connected with the mechanism of the hoist, and provided with means whereby either cone or roller may be taken into frictional driving contact with the corresponding side of the wheel, or into an intermediate position with both cones out of contact when the hoist is not in use.

26,321 of 1901.—J. F. WALLACE: Ventilating Traps and Trap Covers, or "Tobies," for Roadways, House Basements, or other places.

This invention consists in providing means whereby the pipe below the trap cover is prevented from the liability of getting choked with dirt which may fall or may be put through the holes in the perforated trap cover. This is effected by providing the box with a guard-plate upon which dirt through the ventilating holes of the cover drops, the plate being periodically emptied. The plate may rest loosely upon projections formed on the inside of the box, or the plate may be hinged to the box so that it can be opened out when cleaning the drain pipe. In order to allow access of air past the plate, a space is left at the one edge or other of the plate. Or two plates may be employed, the one fixed below the other on the principle of a louvre, so that the air can pass freely up the middle of the box between the two plates.

101 of 1902.—W. CASSELS: Lavatories.

This relates to the construction of a lavatory having a raised inlet-chamber and with an anti-

* All these applications are in the stage in which opposition to the grant of a Patent upon them can be made.

splash ridge in the bottom, formed to deliver an inclined jet of water.

259 of 1902.—W. THOMSON: Valves for the Mixing and Regulating of the Supply of Hot and Cold Water to Baths, Wash-hand Basins, and the like.

This relates to valves for the mixing and regulating of the supply of hot and cold water to baths, wash-hand basins, and the like. This invention consists in the combination of a mixing-chamber, a central inlet chamber for the hot water, a bevelled ring working in said annular inlet chamber and secured to a disc valve, and a tapered plug for closing the cold-water inlet fitted to disc valve.

814 of 1902.—C. M. HUGHES: Fastenings for Roofing Slates.

This relates to a fastener for roofing slates consisting of a plate, a lug or the like formed with or connected to the plate, a folding piece pivotted or jointed thereto, a stop piece on the plate or lug, and a projection or hook on the plate or lug.

830 of 190.—J. L. FERRELL: Wood-preserving and Fireproofing.

This relates to a process of preserving wood, which consists in making an aqueous solution of aluminum sulphate, mixing with said solution a carbonate, impregnating the wood with the mixed solution, and subsequently evaporating the moisture from the wood. The invention further consists in injecting a preserving fluid through the wood from one end thereof to the other, in the direction of the grain of the wood, discharging the fluid from the opposite end of the wood until the specific gravity of the fluid being emitted is substantially equal to that of the fluid being injected; thereupon preventing the escape of the fluid from the wood at the discharge end thereof; and continuing the injection of the fluid until it is distributed radially from the centre through the substance of the wood and appears at the circumference thereof.

868 of 1902.—C. M. STEAD: A Fitting and Reflector for Carrying Electric and other Lamps and Lights.

This relates to a combined fitting and reflector for carrying electric or other lamps or lights consisting of a pendant piece having an upper cylindrical part and three or more wings diverging radially and symmetrically from a common centre, adjoining surfaces of adjoining wings running into each other in a curved manner, the wings being thicker towards the centre, and the outer edges of the wings tapering in a curved manner inwards and downwards, the radius of the said cylindrical part being very considerably less than the greatest radial length of the wings, and a semi-circular or cone-shaped plate resting on the upper horizontal or inclined edges of the wings, and having a central hole in and through which the cylindrical part of the pendant piece projects, and three holes placed or situated respectively in the mid-radial lines between the wings.

905 of 1902.—T. OSBORNE: Out-door Seats.

This relates to out-door seats, and consists essentially in providing a flexible cover, which is sheltered behind the back of the seat until required, and can be brought into use by downward pressure on a suitably placed pedal.

1,968 of 1902.—W. TAYLOR: Valves, Cocks and the like.

This relates to a plug-cock or valve comprising a body with inlet or outlet passages, a semi-circular sharp edge seating, and an externally threaded plug provided with a ring of metal softer than the said seating, which is embedded in the ring by the turning of the plug.

14,493 of 1902.—F. W. COCKING: Method and Appliances for Forward Drying of Bricks and the like in Continuous Down Draught Kilns.

This relates to continuous down draught kilns for the forward drying of bricks and the like, and consists of removable fire receptacles provided with grates near the bottom of each receptacle, the receptacles being so constructed and arranged that the heat and products of combustion are drawn down the feed holes into the kiln chambers.

20,487 of 1902.—G. EAHR: Presses for the manufacture of stove-tiles and the like.

This relates to a tile-press in which a tile-mould is pivoted in front of the mouth of the press, and held fast in its working position by means of a suitable fastening device—for instance, a hook or the like.

19,243 of 1902.—A. FLOOD: Tiles and coverings for floors, walls, and the like.

This relates to a wall, floor, or other surface covering made up of a series of separate, uniform, and interchangeable tiles, having marginal dovetailed recesses and corresponding interlocking projections, one in the middle of each side of the recess, and projections alternating around the margin, and both extending through the entire thickness of the tile.

21,154 of 1902.—W. LEUSCHER and H. THOMANN: Presses for Tiles.

This relates to a tile press for manufacturing tiles, provided with a groove in the overlapping edge for taking up the border of the following tiles, in which press a guided bar is provided, which bar, for forming the groove, can be shifted over the mould plate before forming the overlapping edge, and can be drawn back before lifting the tile out of the mould.

No. 21,503 of 1902.—G. C. SAVAGE: Hot Water Heating and Distributing Systems.

This relates to a water-heating and distributing system, and consists in the combination of a reservoir, a water-heater, two systems of pipes, one forming a short circuit between the reservoir and heater, and the other a long circuit extending beyond the reservoir and heater, and a common return forming a part of both circuits, and valve mechanism whereby the water may be caused to flow through either circuit.

No. 21,646 of 1902.—F. RINGEL: Manufacture of embossed material applicable for decorating walls, ceilings, and similar purposes.

This relates to the manufacture of embossed material suitable for wall decorations or the like, which consists in introducing between two plain sheets of paper a layer of plastic filling material, and then subjecting the one paper surface to the pressure of an embossing roller.

MEETINGS.

FRIDAY, JANUARY 2.

Institution of Junior Engineers.—Mr. H. M. Rounthwaite on "Marine Boilers: a Consideration of the Relative Values of Different Types." 8 p.m.

SATURDAY, JANUARY 3.

Royal Institution.—Professor Hele-Shaw on "Locomotion: on the Earth, through the Water, and in the Air." IV. 3 p.m.

British Institute of Certified Carpenters (Carpenters' Hall).—Monthly meeting. 6 p.m.

Sanitary Inspectors' Association.—Sir James Crichton Browne will deliver his "New Year's Address" at Carpenters' Hall at 6 p.m., subject, "Food Dangers."

MONDAY, JANUARY 5.

Royal Institute of British Architects.—Business meeting to elect candidates for membership. 8 p.m.

London Institution. Rev. Canon Benham on "Old London: Old Houses."—I. 4 p.m.

Liverpool Architectural Society (Incorporated).—1. Special general meeting to consider and approve the revised schedule of charges, clauses 14 *et seq.* 2. Ordinary meeting. Mr. C. Harrison Townsend on "Mosaic Work." 6 p.m.

TUESDAY, JANUARY 6.

Royal Institution.—Professor H. S. Hele-Shaw on "Locomotion: on the Earth, through the Water, in the Air." V. 3 p.m.

Manchester Society of Architects (Student's Meeting).—Mr. J. T. Wynyard Brooke on "Heating and Ventilating."

Glasgow Architectural Association.—Mr. A. N. Malcolm on "Belgium and its Cities." 8 p.m.

WEDNESDAY, JANUARY 7.

London Institution.—Rev. Canon Benham on "Old London: Old Churches." II. 4 p.m.

Architectural Association Discussion Section.—Mr. J. H. Pearson on "Some Points in Ancient Lights Practice." 7.30 p.m.

Builders' Foremen and Clerks of Works' Institution.—Ordinary meeting of the members. 8 p.m.

The Dover Institute.—Mr. J. F. Duthoit on "Brasses." Illustrated. 8 p.m.

Edinburgh Architectural Association.—Mr. A. H. Crawford on "The Building of a House." Illustrated. I. 8 p.m.

THURSDAY, JANUARY 8.

Royal Institution.—Professor Hele-Shaw on "Locomotion: on the Earth, through the Water, in the Air." VI. 3 p.m.

Institution of Electrical Engineers.—1. Mr. W. B. Esson on "Recent Electrical Design." 2. Mr. E. K. Scott on "The Manufacture of Large Dynamos and Alternators." 8 p.m.

Manchester Society of Architects.—Mr. A. W. S. Crosse on "Competitions."

FRIDAY, JANUARY 9.

Architectural Association.—Mr. Andrew Oliver on "Old London; being Notes on Whitehall and the Strand," illustrated by old engravings and lantern slides. 7.30 p.m.

London Institution.—Rev. Canon Benham on "Old London: Old People."—III. 4 p.m.

Birmingham Architectural Association.—Mr. Bedford Lemere on "Architectural Photography."

PRICES CURRENT OF MATERIALS.

*** Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

BRICKS, &c.

	£	s.	d.			
Hard Stocks	1	13	0	per 1,000 alongside, in river.		
Rough Stocks and Grizzles.....	1	10	0	,,	,,	,,
Facing Stocks....	2	12	0	,,	,,	,,
Malms	2	5	0	,,	,,	,,
Flettons	1	7	6	,,	at railway depôt	
Red Wire Cuts ..	1	12	0	,,	,,	,,
Best Fareham Red	3	12	0	,,	,,	,,
Best Red Pressed Ruabon Facing	5	0	0	,,	,,	,,
Best Blue Pressed Staffordshire ..	4	5	0	,,	,,	,,
Do. Bullnose	4	11	0	,,	,,	,,

PRICES CURRENT (*Continued*).

BRICKS, &c.

	£	s.	d.			
Best Stourbridge Fire Bricks	4	8	0	per 1,000 at railway depot.		
GLAZED BRICKS.						
Best White and Ivory Glazed Stretchers.....	13	0	0	,,	,,	,,
Headers	12	0	0	,,	,,	,,
Quoins, Bullnose, and Flats.....	17	0	0	,,	,,	,,
Double Stretchers	19	0	0	,,	,,	,,
Double Headers..	16	0	0	,,	,,	,,
One Side and two Ends.....	19	0	0	,,	,,	,,
Two Sides and one End	20	0	0	,,	,,	,,
Splays, Chamfered, Squints.....	20	0	0	,,	,,	,,
Best Dipped Salt Glazed Stretchers and Headers	12	0	0	,,	,,	,,
Quoins, Bullnose, and Flats.....	14	0	0	,,	,,	,,
Double Stretchers	15	0	0	,,	,,	,,
Double Headers..	14	0	0	,,	,,	,,
One Side and two Ends.....	15	0	0	,,	,,	,,
Two Sides and one End	15	0	0	,,	,,	,,
Splays Chamfered, Squints.....	14	0	0	,,	,,	,,
Second Quality White and Dipped Salt Glazed	2	0	0	,,	less than best.	
Thames and Pit Sand			7	0 per yard, delivered.		
Thames Ballast			6	0 ,,	,,	
Best Portland Cement			30	0 per ton, delivered.		
Best Ground Blue Lias Lime..	21	0	,,	,,		
NOTE.—The cement or lime is exclusive of the ordinary charge for sacks.						
Grey Stone Lime	10s. 6d. per yard, delivered.					
Stourbridge Fire-clay in sacks	27s. 6d. per ton at rly. dpt.					

STONE.

	s.	d.			
Ancaster in blocks	1	11	per ft. cube, deld. rly. depôt.		
Bath ,, ...	1	7	,,	,,	
Farleigh Down Bath ..	1	8	,,	,,	
Beer in blocks	1	6	,,	,,	
Grinshill ,, ...	1	10	,,	,,	
Brown Portland in blocks	2	2	,,	,,	
Darley Dale in blocks..	2	4	,,	,,	
Red Corsehill ,,	2	5	,,	,,	
Closeburn Red Freestone	2	0	,,	,,	
Red Mansfield ,,	2	4	,,	,,	
YORK STONE—*Robin Hood Quality.*					
Scappled random blocks	2	10	,,	,,	
6 in. sawn two sides landings to sizes (under 40 ft. super.)	2	3	per foot super.	,,	
6 in. Rubbed two sides Ditto, Ditto	2	6	,,	,,	
3 in. Sawn two sides slabs (random sizes)..	0	11½	,,	,,	
2 in. to 2½ in. Sawn one side slabs (random sizes)	0	7½	,,	,,	
1½ in. to 2 in. ditto, ditto	0	6	,,	,,	
BEST HARD YORK—					
Scappled random blocks	3	0	per ft. cube	,,	
6 in. sawn two sides, landings to sizes (under 40 ft. sup.)	2	8	per ft. super.	,,	
6 in. Rubbed two sides Ditto	—		,,	,,	
3 in. sawn two sides slabs (random sizes)	1	2	,,	,,	
2 in. self-faced random flags.....	0	5	,,	,,	
Hopton Wood (Hard Bed) in blocks	2	3	per ft. cube.		
,, ,, ,, 6 in. sawn both sides landings	2	7	per ft. super. deld. rly. depôt.		
,, ,, ,, 3 in. do.	1	2½	,,	,,	

SLATES.

in.	in.	£	s.	d.		
20×10 best blue Bangor..		13	2	6	per 1000 of 1200 at ry. dep.	
20×12 ,, ,, ,,		13	17	6	,,	,,
20×10 best seconds ,,		12	15	0	,,	,,
20×12 ,, ,, ,,		13	10	0	,,	,,
16×8 best ,,		7	0	0	,,	,,
20×10 best blue Portmadoc ..		12	5	0	,,	,,
16×8 best blue Portmadoc		6	0	0	,,	,,
20×10 best Eureka unfading green....		15	0	0	,,	,,
20×12 ,, ,,		16	10	0	,,	,,
18×10 ,, ,,		11	10	0	,,	,,
16×8 ,, ,,		8	7	6	,,	,,
20×10 permanent green		10	10	0	,,	,,
18×10 ,, ,,		9	0	0	,,	,,
16×8 ,, ,,		6	5	0	,,	,,

TILES.

	s.	d.			
Best plain red roofing tiles..	42	0	per 1,000, at rly. depôt.		
Hip and valley tiles....	3	7	per doz.	,,	,,
Best Broseley tiles	50	0	per 1,000	,,	,,
Do. Ornamental Tiles	52	6	,,	,,	,,
Hip and valley tiles....	4	0	per doz.	,,	,,
Best Ruabon Red, brown or brindled Do. (Edwards)	57	6	per 1,000	,,	,,
Do. ornamental Do.	60	0	,,	,,	,,
Hip tiles	4	0	per doz.	,,	,,
Valley tiles.....	3	0	,,	,,	,,
Best Red or Mottled Staffordshire Do. (Peakes)	51	0	per 1,000	,,	,,
Do. Ornamental Do.	54	6	,,	,,	,,
Hip tiles	4	1	per doz.	,,	,,
Valley tiles.....	3	8	,,	,,	,,
Best "Rosemary" brand plain tiles	48	0	per 1,000	,,	,,
Do. Ornamental Do.	50	0	,,	,,	,,
Hip tiles	4	0	per doz.	,,	,,
Valley tiles	3	8	,,	,,	,,

[*See also page 27.*

COMPETITIONS, CONTRACTS AND PUBLIC APPOINTMENTS.

(For some Contracts, &c., still open, but not included in this List, see previous issues.)

COMPETITIONS.

Nature of Work or Materials.	By whom Advertised.	Premiums.	Designs to be delivered
Public Library, Finkle-street	Workington Corporation	25*l.*, 15*l.*, 10*l.*	Jan. 20
Designs for University Buildings, Cape of Good Hope	Agnt.-Gen. for Cape of Good Hope	400*l.*, 200*l.*, 100*l.*	Jan. 31
*Laying-out Piece of Land for Recreation Ground	Winchester Corporation	75*l.* and 25*l.*	Feb. 10
*Extension of Town Hall	Hull Corporation	100 guineas and 25 guineas	Mar. 4
*New Free Library	U.D.C. of Castleford	15*l.* and 10*l.*	Mar. 31

CONTRACTS.

Nature of Work.	By whom Advertised.	Forms of Tender, &c., supplied by	Tenders to be delivered
Boundary Walls, &c.	Bridgwater Town Council	Borough Surveyor, High-street, Bridgwater	Jan. 6
Four Houses, Buttershaw, Yorks	.....	Brayshaw & Dixon, Architects, Halifax-road, Buttershaw	do.
Three Cottages, Long-lane, Honley, Yorks	.....	H. Coldwell, Honley	do.
Coal Offices, Acton	Great Western Railway Company...	G. K. Mills, Paddington Station, London	do.
Additions to Station, Mountain Ash, Glam	do.	do.	do.
Road Works, Washington terrace, North Shields	.....	J. F. Smillie, Borough Surveyor, North Shields	do.
Pier Works, Cappaleigh, Castledown	Cork County Council	G. M'Carthy, Court House, Cork	do.
Bridge Works, Boscomoor, Staffs	Cannock R.D.C	H. M. Whitehead, Surveyor, Mill-street, Penkridge	do.
Public Convenience	Trowbridge U.D.C.	H. G. N. Lailey, Civil Engineer, Town Hall, Trowbridge	do.
Additions to Hospital	St. Albans Town Council	City Surveyor, Town Hall, St. Albans	do.
Road Works, Park-road, &c.	Croydon Corporation	Borough Road Surveyor, Town Hall, Croydon	do.
Gasworks Extension	Teignmouth U.D.C.	J. A. Gray, Engineer, Teignmouth	do.
*Building for Bakery	Sheerness Economical Soc., Ltd.	Offices of the Sheerness Economical Society, Limited, Sheerness	Jan. 7
Cast-iron Pipes	Basingstoke Town Council	G. Fitton, Town Hall, Basingstoke	do.
Houses, Fraserburgh, N.B.	Messrs. J. & G. Wallace	W. Reid, Architect, Saltoun-square, Fraserburgh	do.
Cast-iron Pipes, Upper Midhope	Barnsley Corporation	T. & C. Hawksley, Civil Engineer, 30, Great George-street, S.W.	do.
Club House	Belfast Bowling Club	H. Hobart, Architect, Dromore, Co. Down	do.
Works at Fire Brigade Station, Balfour-road	Weybridge U.D.C.	J. S. Crawshaw, Surveyor, Council Offices, Weybridge	do.
Shop, &c., Neath-road, Ystradgynlais, Wales	.....	T. Williams, Engineer, Pelican-street, Ystradgynlais	do.
Three Houses and Shop, Warley-road, Halifax	.....	L. Coates, Architect, Yorks Bank Chambers, Halifax	Jan. 8
Public Convenience, &c.	Weymouth U.D.C.	Borough Engineer, Market-Street, Melcombe Regis, Dorset	do.
Additions to Municipal Offices	York Corporation	A. Creer, Engineer, Guildhall, York	do.
Stores, &c., Building	Uxbridge R.D.C.	J. F. Stow, Survoyor, Corn Exchange, Uxbridge	do.
Bridge, Wilford-street	Nottingham Corporation	A. Brown, Civil Engineer, Guildhall, Nottingham	do.
Cast-iron Pipes (700 tons)	Southampton Corporation	W. Matthews, Engineer, 18, French-street, Southampton	Jan. 9
Fireclay Goods for Gasworks	Nelson (Lancs.) Corporation	A. J. Hope, Engineer, Gasworks, Nelson	do.
Market, North Church-side	Hull Corporation	J. H. Hirst, City Architect, Town Hall, Hull	do.
Streets, Kirkcaldy	Mr. R. C. Fergusson	W. D. Lang, Civil Engineer, Kirkcaldy	Jan. 10
Sewerage Works, Cresswell, near Chesterfield	Clown R.D.C.	E. H. Barber, Civil Engineer, Clown, Chesterfield	do.
Paving Works, Pasture-road, &c.	Leeds Corporation	City Engineer, Municipal Buildings, Leeds	do.
Causewaying Bridge-street	Dollar (N.B.) Town Council	Town Clerk, Dollar, N.B.	do.
Hotel, Hertford	Messrs. McMullen & Sons, Ltd.	J. Farley, Architect, Old Cross, Hertford	Jan. 12
Shop, Hertford	do.	do.	do.
Schools, Tylorstown	Ystradyfodwg School Board	J. Rees, Architect, Pentre	do.
*Reconstruction of Chandlersford Bridge	Southampton County Council	County Surveyor, The Castle, Winchester	do.
Additions to St. John's Home	Ipswich Guardians	H. J. Wright, Architect, Museum-street, Ipswich	Jan. 13
Waterworks, Wanborough	Swindon R.D.C.	F. Redman, Engineer, 24, Wood-street, Swindon	do.
Works at School, Salisbury-road	Plymouth School Board	G. C. Cook, 18, Princess-square, Plymouth	do.
*Making, &c., Gowan-road, Willesden Green, &c.	Willesden District Council	Engineer to the Council, Public Offices, Dyne-road, Kilburn, N.W.	do.
*Road-making and Paving Works	do.	do.	do.
*Extension of Boiler House, &c.	Hackney Union	Clerk to the Guardians, Clerk's Offices, Sydney-rd., Homerton, N.E.	Jan. 14
Electrical Plant	Stoke-upon-Trent Corporation	P. J. S. Tiddeman, Borough Electrical Engineer, Stoke-upon-Trent	do.
Electrical Plant, Egremont, Cheshire	Wallasey U.D.C.	J. H. Crowther, Great Float, Birkenhead	Jan. 15
Water Supply Works	Sittingbourne U.D.C.	G. F. Deacon, Engineer, 16, Great George-street, S.W.	do.
Gasworks Extension	South Molton (Devon) Town Coun.	L. Riccard, Town Offices, South Molton	Jan. 16
Stabling, &c., at Asylum, St. Martin's Hill	Canterbury Asylum Visitors	W. J. Jennings, Architect, St. Margaret's-street, Canterbury	do.
*Sanitary Arrangements at Christ's College, Finchley	Finchley U.D.C.	H. T. Wakelam, Guildhall, Westminster, S.W.	Jan. 17
Bridge over River Wear, Harelaw	Weardale (Durham) R.D.C.	G. W. Eggleston, Surveyor, Stanhope	Jan. 19
*Draining, Kerbing, &c., First Avenue, Cowley-place, &c.	Hendon U.D.C.	Engineer to the Council, Council Offices, Hendon, N.W.	do.
*Annual Contracts	Borough of Bermondsey	Borough Electrical Engineer, Town Hall, Spa-road, S.E.	do.
*Block of Balcony Dwellings, London Fields, N.E.	London County Council	Housing Section of Architect's Dept., 19, Charing Cross-road, S.W.	Jan. 20
*Car Shed, Rye-lane Depot	do.	Architect's (Highways) Department, 19, Charing Cross-road, S.W.	do.
Fencing and Gates	Southall (Middlesex) U.D.C.	R. Brown, Civil Engineer, Public Offices, Southall	do.
*New Ward at Asylum, Devizes	Wilts County Pauper &c., Asylum.	County Surveyor, Trowbridge	do.
*Stables, Cart Sheds, &c.	Tottenham U.D.C.	Engineer to the Council, 712, High-road, Tottenham	do.
Post Office, Long-street	Middleton (Lancs.) Corporation	Stones & Stones, Architects, 10, Richmond-terrace, Blackburn	Jan. 22
Tenement Offices, Sadler-street	do.	do.	do.
Water Supply Works	Ipswich Corporation	Kennedy & Jenkin, Civil Engineers, 17, Victoria-street, S.W.	do.
Council Offices	Ambourne (Cornwall) U.D.C.	S. Hill, Architect, Redruth	do.
Improvement Works, Duke-street	Castleford U.D.C.	W. Green, Surveyor, Council Offices, Castleford	do.
Harbour Extension	Scrabster (N.B.) Harbour Trustees.	J. Barron, Civil Engineer, 1, Bon-Accord-street, Aberdeen	Jan. 24
*Sanitary Conveniences at Tooting Broadway	Wandsworth Borough Council	Surveyor's Office, 215, Balham High-road, S.W.	Jan. 26
*Making-up, &c., Elsenham-street	Metropolitan Boro' of Wandsworth	Council House, East Hill, Wandsworth	do.
Cast-iron Pipes	Hastings Corporation	P. H. Palmer, Civil Engineer, Town Hall, Hastings	Jan. 27
*Pipe Sewer, &c., Baldwin's Hill, Springfield	R.D.C. of Godstone	Alfred Williams & Son, 14, Victoria-street, S.W.	Jan. 29
Ornamental Iron Gates	Margate Corporation	E. A. Borg, Civil Engineer, Town Hall, Margate	No date
*Conversion of Villas into Shops, &c., Clacton-on-Sea	W. Downey, Esq.	G. Gardiner, Architect, 5, Marine Parade, Clacton-on-Sea	do.
Surveyor's Materials	Margate Corporation	E. A. Borg, Civil Engineer, Margate	do.
Shops, &c., Manningham-lane, Bradford	.....	W. J. Morley & Son, Architects, 269, Swan-arcade, Bradford	do.
Hotel, Abertysswg	.....	G. L. Watkins, Architect, Station-terrace, Caerphilly	do.

PUBLIC APPOINTMENTS.

Nature of Appointment.	By whom Required.	Salary.	Application to be in
*Clerk of Works	Newport Lunacy Visiting Com.	Not stated	Jan. 16

Those marked with an asterisk ( ) are advertised in this Number. *Competitions*, iv. *Contracts*, *pp.* iv. vi. viii. x. & xxxi. *Public Appointments*, xxviii.

PRICES CURRENT (*Continued*).

WOOD.

BUILDING WOOD.—YELLOW.

	At per standard. £ s. d.	£ s. d.
Deals: best 3 in. by 11 in. and 4 in. by 9 in and 11 in.	15 10 0	16 10 0
Deals: best 3 by 9	14 10 0	15 10 0
Battens: best 2½ in. by 7 in. and 8 in., and 3 in. by 7 in. and 8 in.	11 10 0	12 10 0
Battens: best 2½ by 6 and 3 by 6 ..	0 10 0	less than 7 in. and 8 in.
Deals: seconds	1 0 0	less than best
Battens: seconds	0 10 0	„ „ „
2 in. by 4 in. and 2 in. by 6 in. ..	9 0 0	9 10 0
2 in. by 4½ in. and 2 in. by 5 in. ..	8 10 0	9 10 0
Foreign Sawn Boards— 1 in. and 1½ in. by 7 in.	0 10 0	more than battens.
¾ in.	1 0 0	„
Fir timber: Best middling Danzig or Memel (average specification	At per load of 50 ft. 4 10 0	5 0 0
Seconds	4 5 0	4 10 0
Small timber (8 in. to 10 in.)	3 12 6	3 15 0
Small timber (6 in. to 8 in.)	3 0 0	3 10 0
Swedish balks	2 15 0	3 0 0
Pitch-pine timber (30 ft. average)	3 5 0	3 15 0

JOINERS' WOOD.	At per standard.	
White Sea: First yellow deals, 3 in. by 11 in.	23 0 0	24 0 0
3 in. by 9 in.	21 0 0	22 10 0
Battens, 2½ in. and 3 in. by 7 in.	17 0 0	18 10 0
Second yellow deals, 3 in. by 11 in.	18 10 0	20 0 0
„ „ 3 in. by 9 in.	17 10 0	19 0 0
Battens, 2½ in. and 3 in. by 7 in.	13 10 0	14 10 0
Third yellow deals, 3 in. by 11 in. and 9 in.	15 10 0	16 10 0
Battens, 2½ in. and 3 in. by 7 in.	11 10 0	12 10 0
Petersburg: first yellow deals, 3 in. by 11 in.	21 0 0	22 10 0
Do. 3 in. by 9 in.	18 0 0	19 10 0
Battens	13 10 0	15 0 0
Second yellow deals, 3 in. by 11 in.	16 0 0	17 0 0
Do. 3 in. by 9 in.	14 10 0	16 0 0
Battens	11 10 0	12 10 0
Third yellow deals, 3 in. by 11 in.	13 10 0	14 0 0
Do. 3 in. by 9 in.	13 0 0	14 0 0
Battens	10 0 0	11 0 0
White Sea and Petersburg:— First white deals, 3 in. by 11 in.	14 10 0	15 10 0
„ „ 3 in. by 9 in.	13 10 0	14 10 0
Battens	11 0 0	12 0 0
Second white deals 3 in. by 11 in.	13 10 0	14 10 0
„ „ „ 3 in. by 9 in.	12 10 0	13 10 0
„ „ „ battens	9 10 0	10 10 0
Pitch-pine: deals	16 0 0	18 0 0
Under 2 in. thick extra	0 10 0	1 0 0
Yellow Pine—First, regular sizes ..	33 0 0	upwards.
Oddments	22 0 0	24 0 0
Seconds, regular sizes	24 10 0	26 10 0
Yellow Pine Oddments	20 0 0	22 0 0
Kauri Pine—Planks, per ft. cube..	0 3 6	0 4 6
Danzig and Stettin Oak Logs— Large, per ft. cube	0 2 6	0 3 6
Small „ „	0 2 3	0 2 6
Wainscot Oak Logs, per ft. cube ..	0 5 0	0 5 6
Dry Wainscot Oak, per ft. sup. as inch	0 0 7	0 0 8
¾ in. do. do.	0 0 6½	- - -
Dry Mahogany— Honduras, Tabasco, per ft. sup. as inch	0 0 9	0 0 11
Selected, Figury, per ft. sup. as inch	0 1 6	0 2 0
Dry Walnut, American, per ft. sup. as inch	0 0 10	0 1 0
Teak, per load	16 10 0	20 0 0
American Whitewood Planks— Per ft. cube	0 4 0	- - -

Prepared Flooring—	Per square.	
1 in. by 7 in. yellow, planed and shot	0 13 6	0 17 6
1 in. by 7 in. yellow, planed and matched	0 14 0	0 18 0
1¼ in. by 7 in. yellow, planed and matched	0 16 0	1 1 6
1 in. by 7 in. white, planed and shot	0 11 6	0 13 6
1 in. by 7 in. white, planed and matched	0 12 0	0 14 0
1¼ in. by 7 in. white, planed and matched	0 14 6	0 16 6
¾ in. by 7 inch yellow matched and beaded or V-jointed boards	0 11 0	0 13 6
1 in. by 7 in. do. do. do.	0 14 0	0 18 0
¾ in. by 7 in. white do. do.	0 10 0	0 11 6
1 in. by 7 in. do. do. do.	0 11 6	0 13 6

6-in. at 6d. to 9d. per square less than 7-in.

JOISTS, GIRDERS, &c.

	In London, or delivered Railway Vans, per ton. £ s. d.	£ s. d.
Rolled Steel Joists, ordinary sections	6 5 0	7 5 0
Compound Girders „ „	8 2 6	9 5 0
Angles, Tees and Channels, ordinary sections	7 17 6	8 17 6
Flitch Plates	8 5 0	8 15 0
Cast Iron Columns and Stanchions, including ordinary patterns	7 2 6	8 5 6

METALS.

	Per ton, in London £ s. d.	£ s. d.
IRON— Common Bars	7 15 0	8 5 0.
Staffordshire Crown Bars, good merchant quality	8 5 0	8 15 0
Staffordshire "Marked Bars" ..	10 10 0	- - -
Mild Steel Bars	9 0 0	9 10 0
Hoop Iron, basis price	9 5 0	9 10 0
„ „ galvanised	16 0 0	. . .
(* And upwards, according to size and gauge.)		
Sheet Iron, Black.— Ordinary sizes to 20 g.	10 0 0	- - -
„ „ to 24 g.	11 0 0	- - -
„ „ to 26 g.	12 10	- - -

PRICES CURRENT (*Continued*).

METALS.

	Per ton, in London £ s. d.	£ s. d.
Sheet Iron, Galvanised, flat, ordinary quality— Ordinary sizes 6 ft. by 2 ft. to 3 ft. to 20 g.	12 15 0	- - -
„ „ 22 g. and 24 g.	13 5 0	- - -
„ „ 26 g.	14 5 0	- - -
Sheet Iron, Galvanised, flat, best quality:— Ordinary sizes to 20 g.	16 0 0	- - -
„ „ 22 g. and 24 g.	16 10 0	- - -
„ „ 26 g.	18 0 0	- - -
Galvanised Corrugated Sheets:— Ordinary sizes, 6 ft. to 8 ft. 20 g.	12 15 0	- - -
„ „ 22 g. and 24 g.	13 5 0	- - -
„ „ 26 g.	14 5 0	- - -
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. by 20 g. and thicker ..	12 0 0	- - -
„ „ 22 g. and 24 g.	13 0 0	- - -
„ „ 26 g.	14 5 0	- - -
Cut nails, 3 in. to 6 in. (Under 3 in. usual trade extras.)	9 5 0	9 15 0

LEAD, &c.

	Per ton, in London. £ s. d.	£ s. d.
LEAD—Sheet, English, 3 lbs. & up.	13 5 0	- - -
Pipe in coils	13 15 0	- - -
Soil pipe	16 5 0	- - -
Compo Pipe	16 5 0	- - -
ZINC—Sheet— Vieille Montagne ton	25 0 0	- - -
Silesian	24 10 0	- - -
COPPER— Strong Sheet per lb.	0 0 10	- - -
Thin „	0 0 11	- - -
Copper nails „	0 0 11	- - -
BRASS— Strong Sheet „	0 0 9	- - -
Thin „	0 0 10	- - -
TIN—English Ingots „	0 1 3	- - -
SOLDER—Plumbers' „	0 0 0½	- - -
Tinmen's „	0 0 8½	- - -
Blowpipe „	0 0 9½	- - -

ENGLISH SHEET GLASS IN CRATES.

15 oz. thirds	2⅝d. per ft. delivered.
„ fourths	1⅞d. „ „
21 oz. thirds	3½d. „ „
„ fourths	2½d. „ „
26 oz. thirds	4d. „ „
„ fourths	3⅛d. „ „
32 oz. thirds	5d. „ „
„ fourths	4½d. „ „
Fluted sheet, 15 oz.	3d. „ „
„ 21 oz.	4d. „ „
⅛ Hartley's Rolled Plate	1⅜d. „ „
1/16 „ „ „	2d. „ „
¼ „ „ „	2¼d. „ „

OILS, &c.

		£ s. d.
Raw Linseed Oil in pipes or barrels	per gallon	0 2 4
„ „ „ in drums	„	0 2 7
Boiled „ „ in pipes or barrels	„	0 2 6
„ „ „ in drums	„	0 2 9
Turpentine, in barrels	„	0 3 3
„ in drums	„	0 3 5
Genuine Ground English White Lead	per ton	21 0 0
Red Lead, Dry	„	20 0 0
Best Linseed Oil Putty	per cwt.	0 8 6
Stockholm Tar	per barrel	1 12 0

VARNISHES, &c.

	Per gallon. £ s. d.
Fine Pale Oak Varnish	0 8 0
Pale Copal Oak	0 10 6
Superfine Pale Elastic Oak	0 12 6
Fine Extra Hard Church Oak	0 10 6
Superfine Hard-drying Oak, for Seats of Churches	0 14 0
Fine Elastic Carriage	0 12 6
Superfine Pale Elastic Carriage	0 16 0
Fine Pale Maple	0 16 0
Finest Pale Durable Copal	0 18 0
Extra Pale French Oil	1 1 0
Eggshell Flatting Varnish	0 18 0
White Copal Enamel	1 4 0
Extra Pale Paper	0 12 0
Best Japan Gold Size	0 10 6
Best Black Japan	0 16 0
Oak and Mahogany Stain	0 9 0
Brunswick Black	0 8 6
Berlin Black	0 16 0
Knotting	0 10 0
French and Brush Polish	0 10 0

TO CORRESPONDENTS.

NOTE.—The responsibility of signed articles, letters, and papers read at meetings rests, of course, with the authors.

We cannot undertake to return rejected communications.

Letters or communications (beyond mere news items) which have been duplicated for other journals are NOT DESIRED.

All communications must be authenticated by the name and address of the sender, whether for publication or not. No notice can be taken of anonymous communications.

We are compelled to decline pointing out books and giving addresses.

Any commission to a contributor to write an article is given subject to the approval of the article, when written, by the Editor, who retains the right to reject it if unsatisfactory. The receipt by the author of a proof of an article in type does not necessarily imply its acceptance.

All communications regarding literary and artistic matters should be addressed to THE EDITOR; those relating to advertisements and other exclusively business matters should be addressed to THE PUBLISHER, and *not* to the Editor.

TENDERS.

[Communications for insertion under this heading should be addressed to "The Editor," and must reach us *not later than 10 a.m. on Thursdays.* N.B.—We cannot publish Tenders unless authenticated either by the architect or the building-owner; and we cannot publish announcements of Tenders accepted unless the amount of the Tender is given, nor any list in which the lowest Tender is under 100*l.*, unless in some exceptional cases and for special reasons.]

* Denotes *accepted.* † Denotes *provisionally accepted.*

ACTON.—For the erection of the South Acton (Boys-Board School, for the School Board for Acton, W. Messrs. Edward Monson & Sons, Architects to the Board, Acton Vale, W., and 22, Buckingham-street, Adelphi, W.C. Quantities by Mr. F. T. W. Miller, 9, Queen Anne's-gate, S.W.:—

W. G. Dickens	£16,670	Speechley & Smith	£13,700
Patman & Fotheringham	14,900	Chas. Brightman	13,660
Godson & Sons	14,665	Lawrence & Son	13,494
Geo. Gray	14 639	Walter Wallis	13,450
Barker & Co., Ltd.	14,550	Knight & Son	13,384
Dangerlee & Sons	14,287	R. L. Tonge	13,300
Foster Bros.	14,266	Treasure & Son	13,248
W. J. Renshaw	13 997	Hunt & Son	12,735
Spencer Santo & Co.	13,985	W. Blackburn, Elliott-road, Chiswick‡	12,436
F. & E. Davey	13,984	Mark G. King	12,174
Appleby & Sons	13,920		

[Architect's estimate, £12,643.]

‡ Accepted subject to the approval of the Board of Education.

BOURNEMOUTH.—For making St. Leonard's-road and Capstone-road for the Corporation. Mr. F. W. Lacey, Borough Engineer, Town Hall, Bournemouth:—

	St. Leonard's-road.	Capstone-road.
W. P. Saunders	£508 7 2	£688 0 0
M. Loader	533 18 1	463 18 9
G. Froke	387 3 7	427 13 1
Grounds & Newtown	359 15 4	427 7 5
H. C. Brixey, Newtown, Parkstone, Dorset*	377 13 9	386 5 0

BOURNEMOUTH.—For the construction of bridge foundations, &c., Alum Chine, for the Town Council. Mr. F. W. Lacey, C.E., Borough Engineer, Bournemouth:—

W. Hoare	£297	Hoare & Sons, Wharf-road, Bournemouth*	£209
Jenkins & Sons, Ltd.	294		
McWilliam & Son	228		

CARDIFF.—For the erection of a warehouse, Bute Docks, for Messrs. J. Rose & Co. Mr. E. G. C. Down, architect, 31, High-street, Cardiff. Quantities by architect:—

G. Beard	£2,397 0 0	Evans & Bros.	£1,950 0 0
D. Davies	2,395 0 0	Turner & Sons	1,948 0 0
Lattey & Co.	2,315 0 0	A. W. Cadwallader	1,900 0 0
S. Wood	2,072 0 0	Knox & Wells, Bangar-street*	1,888 0 0
W. T. Morgan	2,050 0 0		
Thomas & Co.	2,049 13 10		
Symonds & Co.	1,999 0 0		

GREAT YARMOUTH.—For the erection of a home for girls, The Hollies, Gorleston, for the Union Guardians. Mr. Walter Lake, architect, Regent-street, Great Yarmouth:—

Carter & Wright	£1,006 0	F. Cockrell	£872 10
Bray	938 0	Smith Bros.	805 0
Howes	920 0	A. E. Bond	799 0
Jary	880 0	Moore & Sons, Great Yarmouth*	787 0
Everith	875 0		

LONDON.—For additions to laundry buildings, Lauriegrove, New Cross-road, for the Deptford Borough Council:—

A. Wilson, 4, Vulcan-road, Brockley..£164 19 8

LONDON. — For alterations and additions at 54, Doughty-street, W.C., for Colonel S. Sanderson. Mr. James Neale, F.S.A., architect, 10, Bloomsbury-square, W.C.:—

H. J. Toms	£1,398 15 3	Smith & Norris*	£1,097 18 0
Worsley & Co.	1,210 0 0		

LONDON.—For the new police-court and station at Bermondsey. Mr. J. Dixon Butler, Surveyor to the Metropolitan Police, architect. Quantities by Messrs. Thurgood, Son, & Chidgey:—

Spencer, Santo, & Co.	£44,942	Lovatt	£42,000
Foster & Dicksee	43,887	G. Parker	42,000
Howell J. Williams	43,487	Grover & Son	41,773
Lascelles & Co.	42,868	Cubitt & Co.	41,400
Allen & Sons	42,867	Higgs & Hill	41,244
Martin, Wells, & Co.	42,703	Holloway Bros.	41,089
Clarke & Bracey	42,624	Killby & Gayford	40,933
H. & F. Higgs	42,482	Lawrence & Son	40,380
		Mowlem & Co.	39,446

LONDON.—For the erection of premises, for Messrs. W. Mead & Co., Ltd., at North Wharf-road, Paddington. Messrs. Thomas & Thomas, architects, 191, Edgware-road, W.:—

Gould & Brand	£1,125	Patman & Fothering-ham	£1,080
Godson & Sons	1,110	Bull & Esdaile	1,075
Lawrence & Sons	1,109	Nightingale & Co.	1,075
Richards & Co.	1,089	Chessum & Son	1,038

LONDON.—For the erection of shop, &c., at the Council's wharf, Putney Embankment, for the Wandsworth Borough Council. Mr. P. Dodd, Borough Surveyor, 41, High-street, Wandsworth, S.W.:—

A. Leather	£460 0 0	London and County Builders	£359 2 0
R. A. Jewell	435 0 0	Woodley Bros.	351 7 3
Adamson & Sons	387 0 0	W. R. Williams	350 0 0
Parsons & Co.	387 0 0	T. Pearce	320 0 0
R. Bull	378 0 0	J. Shelley	308 0 0
T. Grant	375 0 0	R. Mills, Brentford*	259 0 0
S. Dockerill	368 0 0		
W. Coates	367 10 0		

[*See also next page.*

LONDON.—For electric lighting to the receiving wards, &c., at the infirmary, St. John's Hill, S.W. Messrs. Lansdell & Harrison, architects, 66, Basinghall-street, E.C.:—

W. G. Murrin ..	£723	15	0	Wm. Simmons ..	£439	8	0
Benham & Sons, Ltd.	716	0	0	London Electrical Engineers, Ltd.	437	0	0
Jackson Bros...	670	10	3	Wenham & Waters, Ltd.	433	0	0
James Wilson ..	592	10	0	W. H. Tilley ..	429	5	0
Hodgson & Co.	590	0	0	Southern Electrical Installation and Wiring Co., Ltd.	424	14	0
Percival S. Tasker	583	9	0	Spearing & Stark	417	0	0
Graham & Biddle	580	0	0*	Ward Bros.	410	10	0
Tamplin & Makovski, Ltd.	563	13	8	Sutton & Co. ..	389	5	10
Walter, Mossop, & Co.....	494	16	0	Bakewell & Co.	348	3	0
Warrington and Dist. Electric Light & Power Co., Ltd.	483	17	0	Coleby & Co. ..	325	0	0
Dawson & Co., Ltd.	480	0	0	Mark Wiedhoft	321	0	0
J. A. Henderson	465	10	0	Fryer & Co., Harrow-road, W.*.....	299	0	0

MIDDLESBROUGH.—For the erection of stable and cart-shed, Albert Park, for the Corporation. Mr. Frank Baker, C.E., Municipal-buildings, Middlesbrough:—

B. Crisp.....	£261	2	9
Allison Bros.....	250	0	0
Newby & Co.	237	0	0
Vinter & Davison	225	0	0
W. Thompson, Middlesbrough*	218	4	0

NORTH CRAY.—For rebuilding stables destroyed by fire at Woollot Hall, North Cray, Kent, for Mr. Ronald Keep. Mr. Ernest H. Abbott, architect, 6, Warwick-court, Gray's Inn, W.C. Quantities by Mr. A. Johnson, 34, Imperial-buildings, Ludgate Circus, E.C.:—

H. Dunn	£1,150	0	0	W. H. Smith ..	£902	0	0
Stebbing & Pannett	942	18	6	W. Mark	844	10	8

SHENLEY HILL (Hertfordshire). — For alterations and additions at Shenley Hill House, for Mr. F. W. R. Hore. Mr. James Neale, F.S.A., architect, 10, Bloomsbury-square, W.C. :—

Crossley & Son, Bromley*	£2,074 0
For Engine and Electric Light Installation.	
Buchanan & Curwen.....	£650 0
J. O. Grant.....	636 0
C. E. Zimdars, London*.....	599 19

SLEAFORD (Lincs.).—For the erection of schools, for the Governors of Carre's Grammar School. Mr. Jesse Clare, architect, Sleaford :—

Pattinson & Sons	£2,553	0		J. J. Banks.....	£2,005	17	
Berry & Clay....	2,326	0		Maxey & Sons, Sleaford*	1,948	0	
Guttridge	2,196	0		Parkes & Son ..	1,929	0	
F. Pattinson	2,191	0					

STOWMARKET.—For rebuilding business premises, for the Co-operative Society. Mr. P. J. Turner, architect, Stowmarket and Westminster, S.W. :—

William Murray	£3,398	Scales & Robins, Cambridge*	£2,985
Ernest West.....	3,063		
Parkington & Son ..	2,990	A. Plummer	2,358

[Architect's estimate, £2,937]

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J. Herbert	4,389	0		D. Roberts	4,045	0	
F. L. Jones.....	4,376	0		W. H. Gibbs	3,993	0	
C. Griffiths	4,300	0		J. Mallen	3,990	0	
T. Tildesley	4,269	0		S. Wooton, Bloxwich*.....	3,950	0	
W. Wistance	4,245	0					

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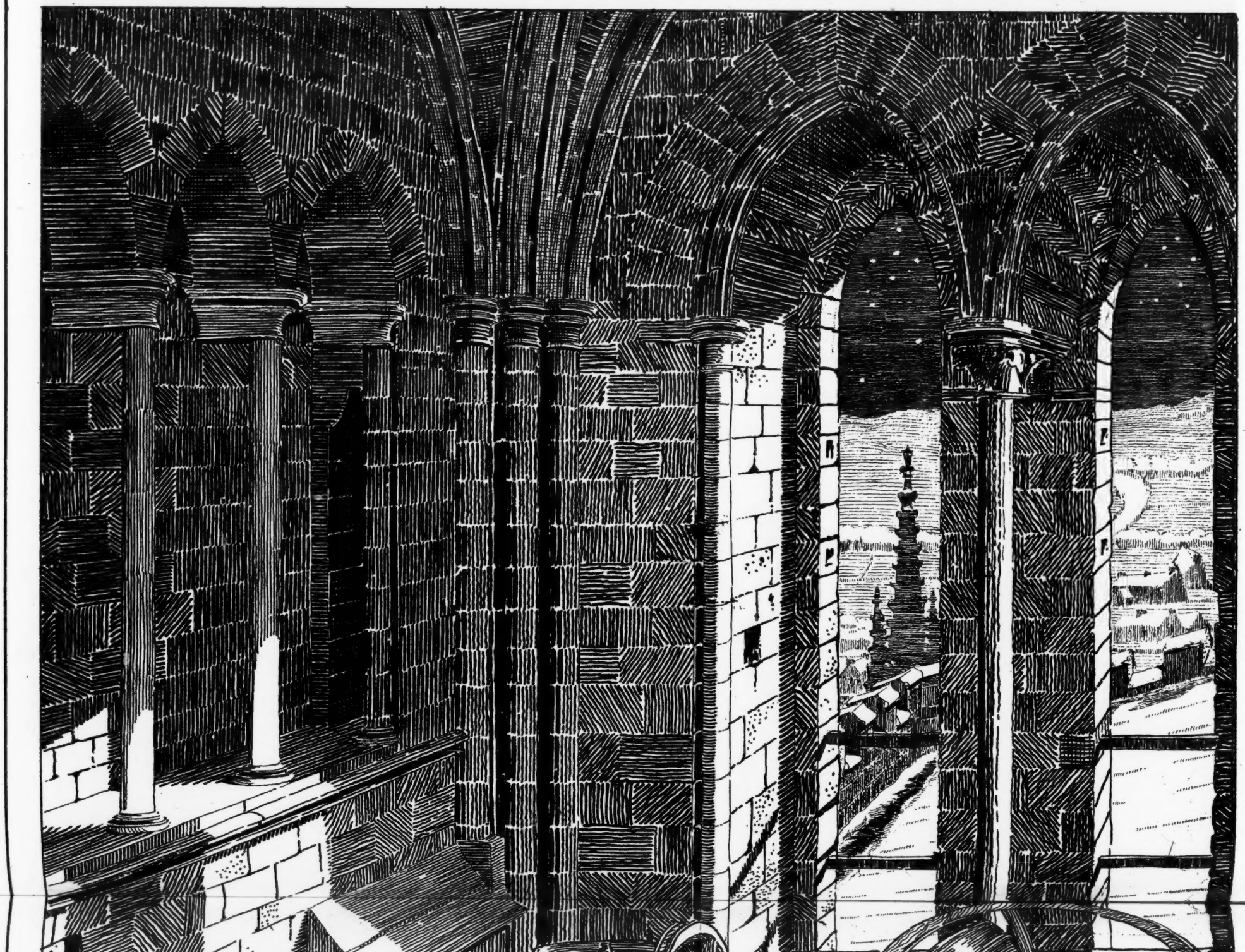

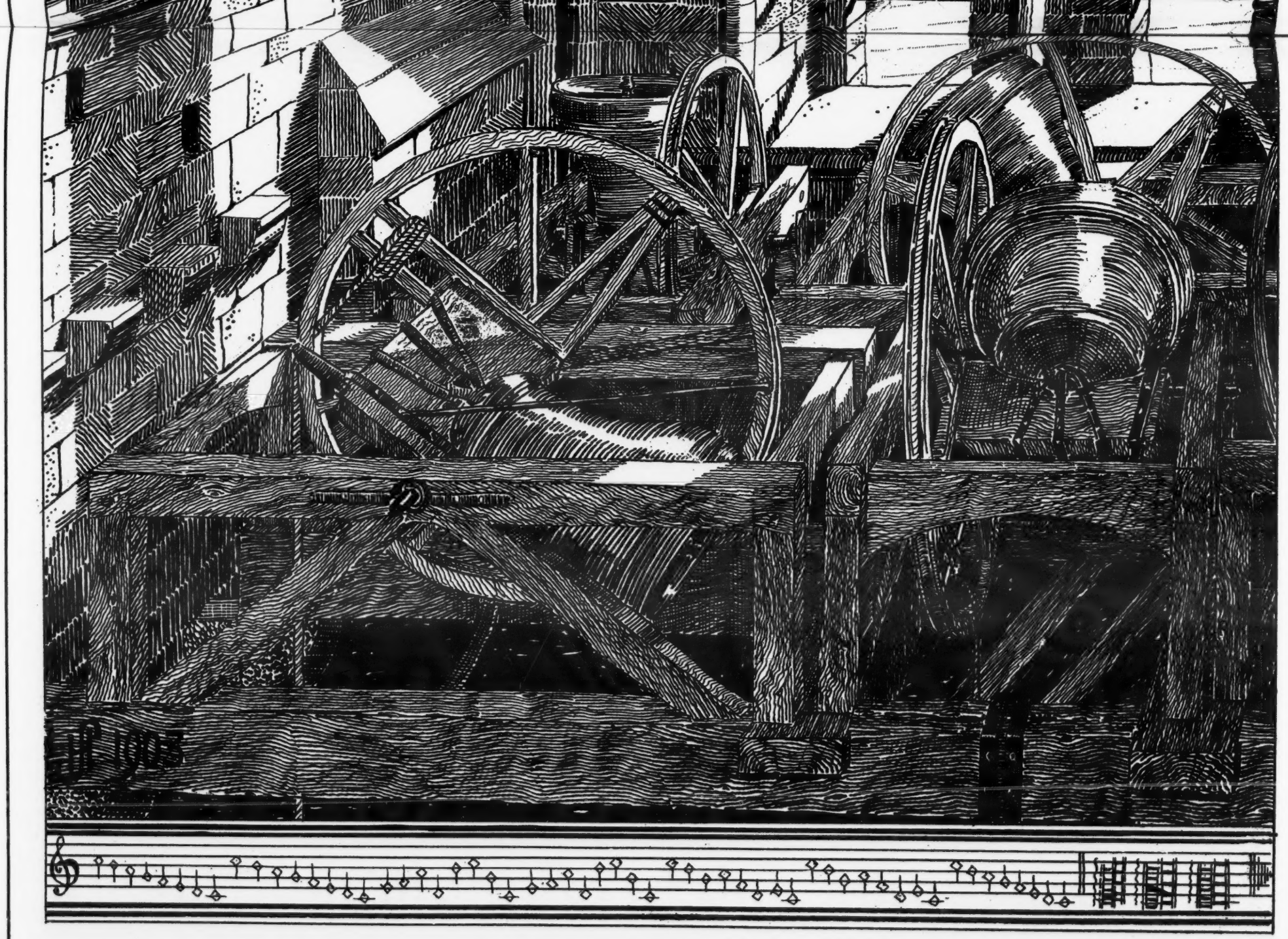

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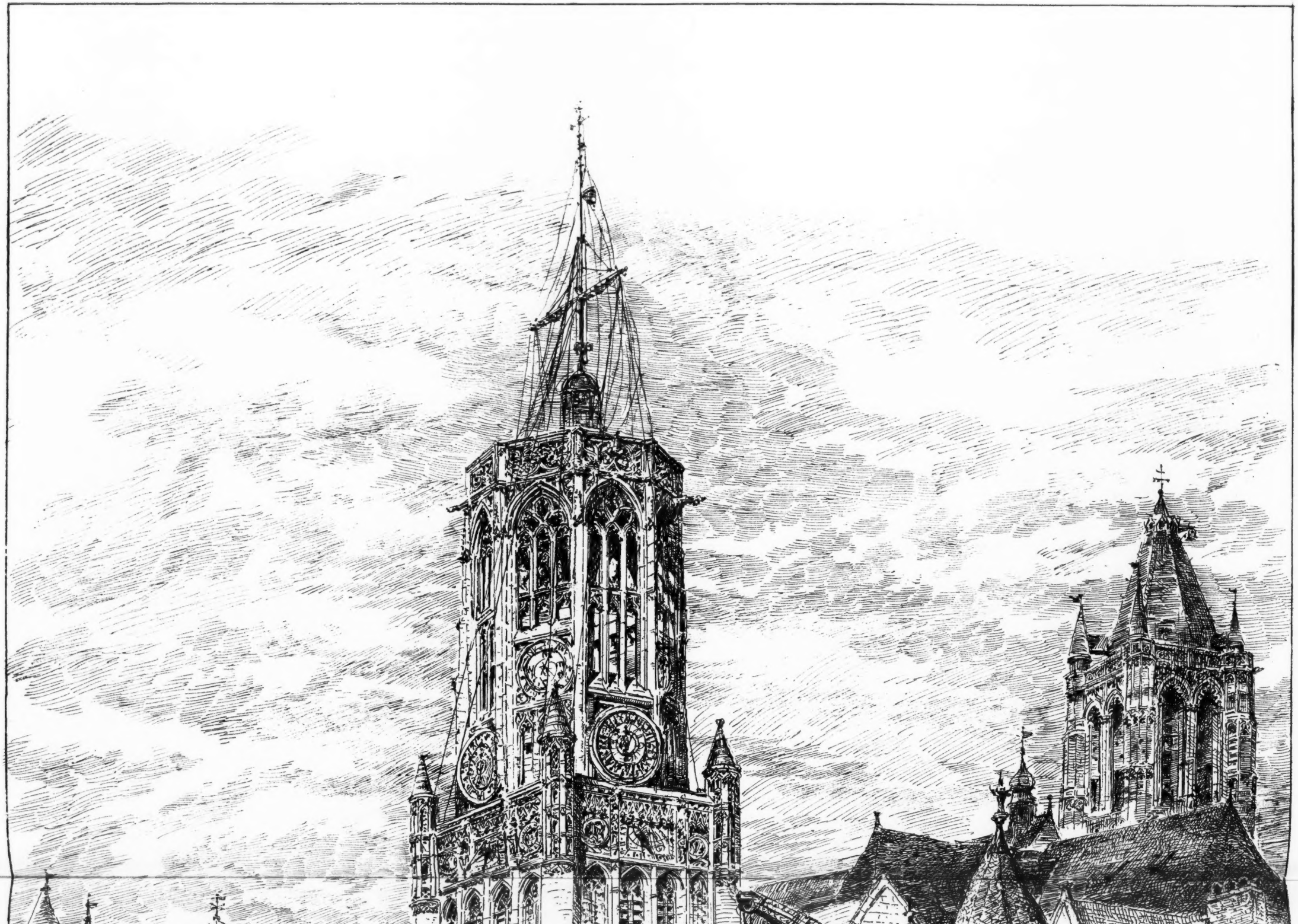

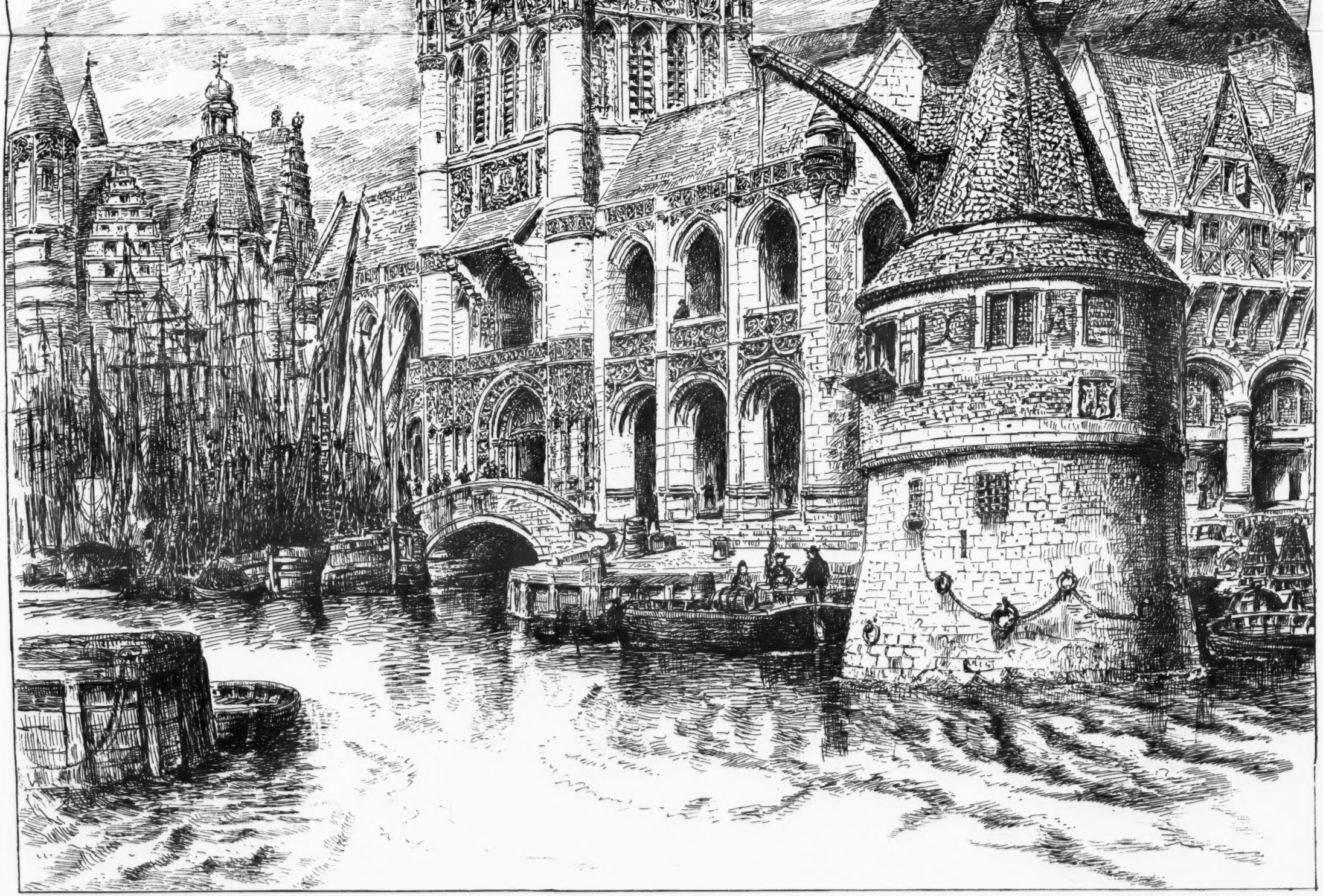

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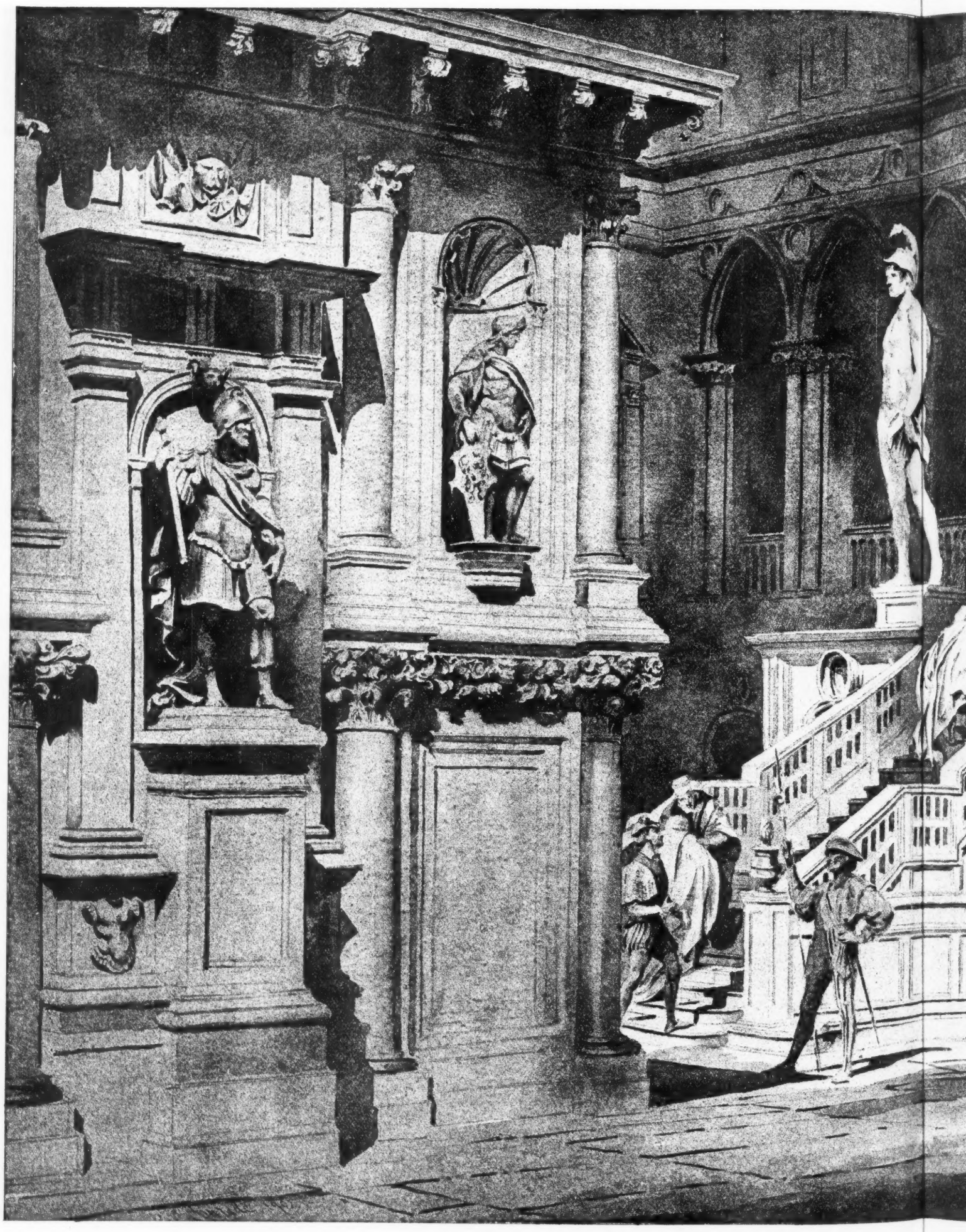

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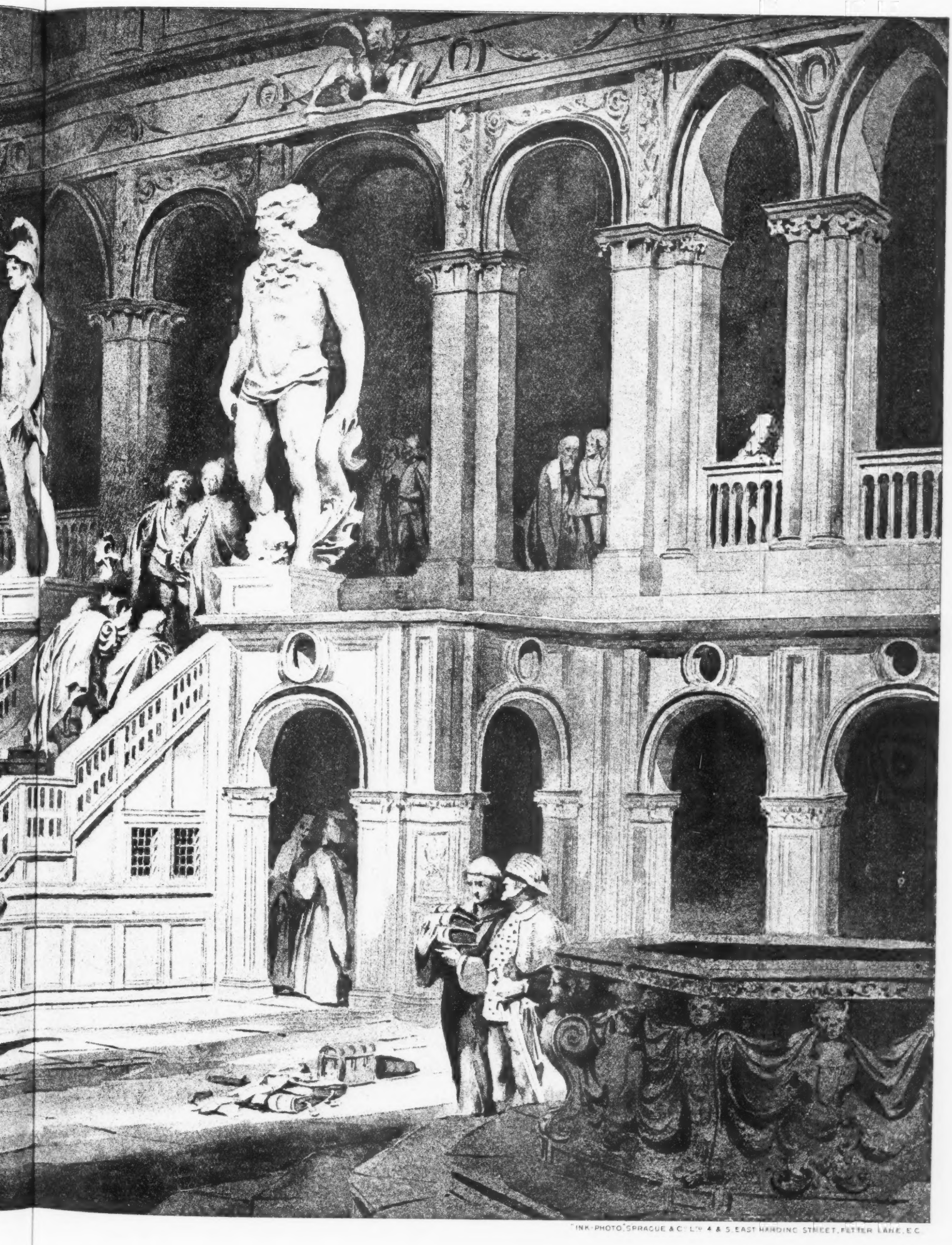

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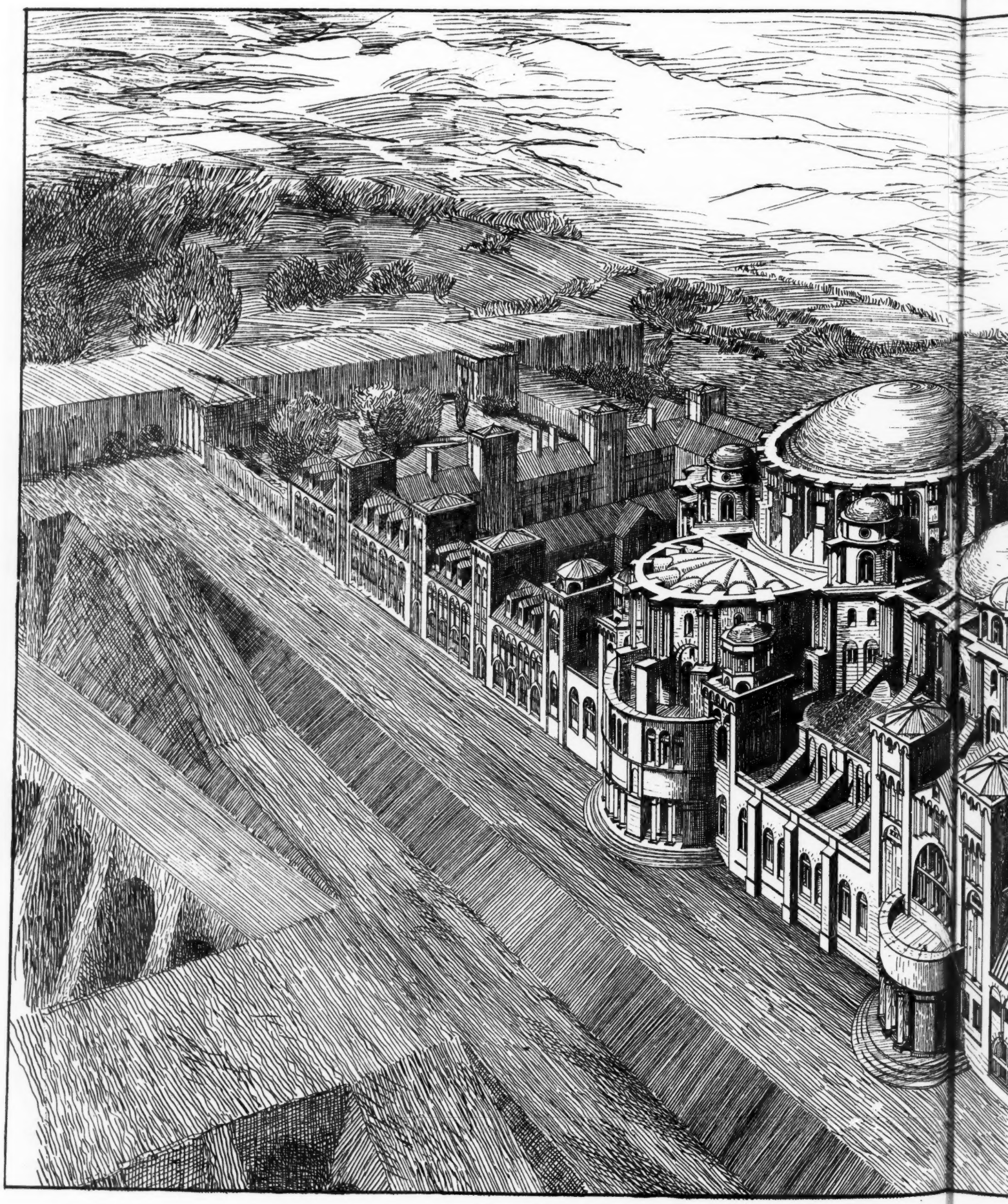

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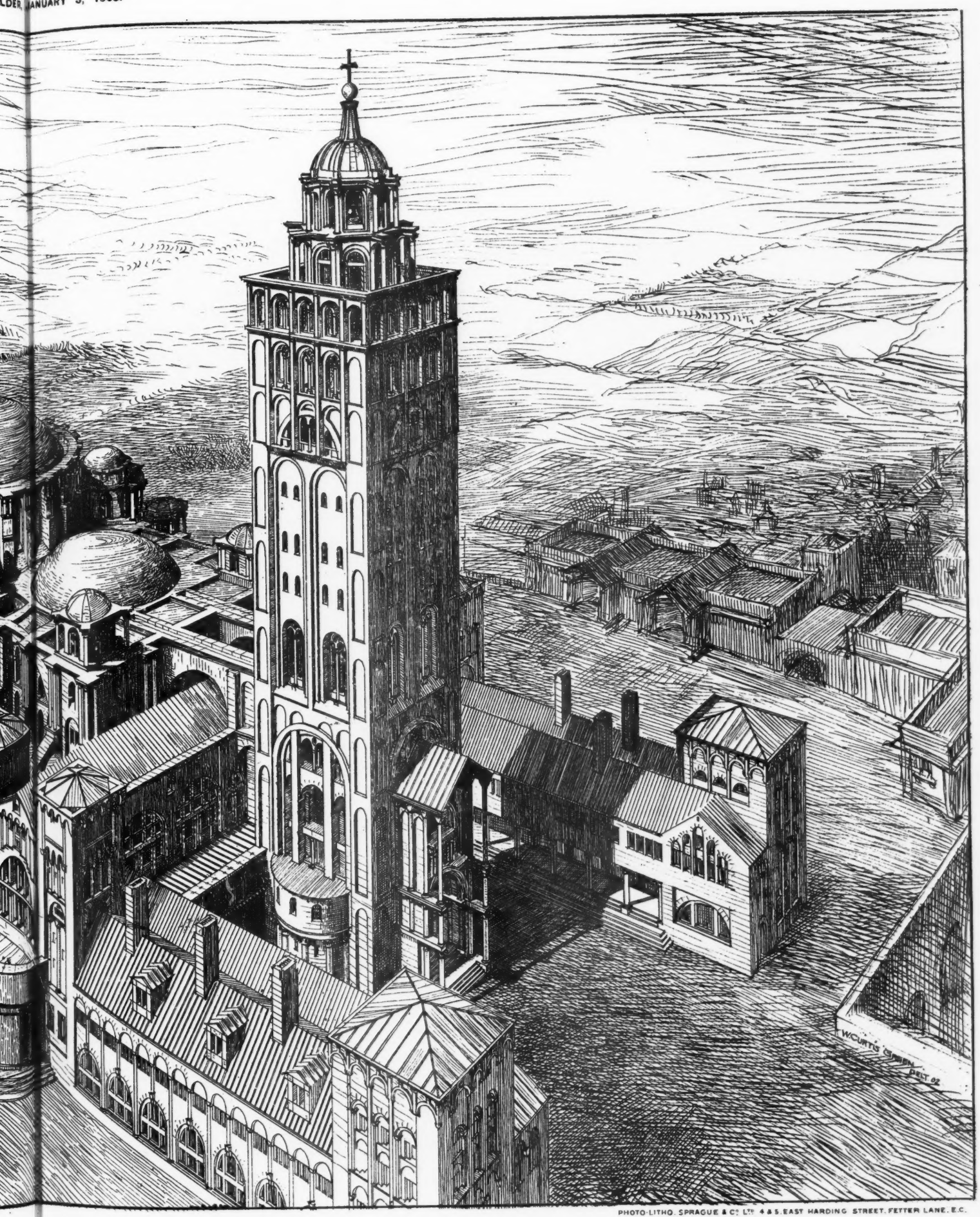

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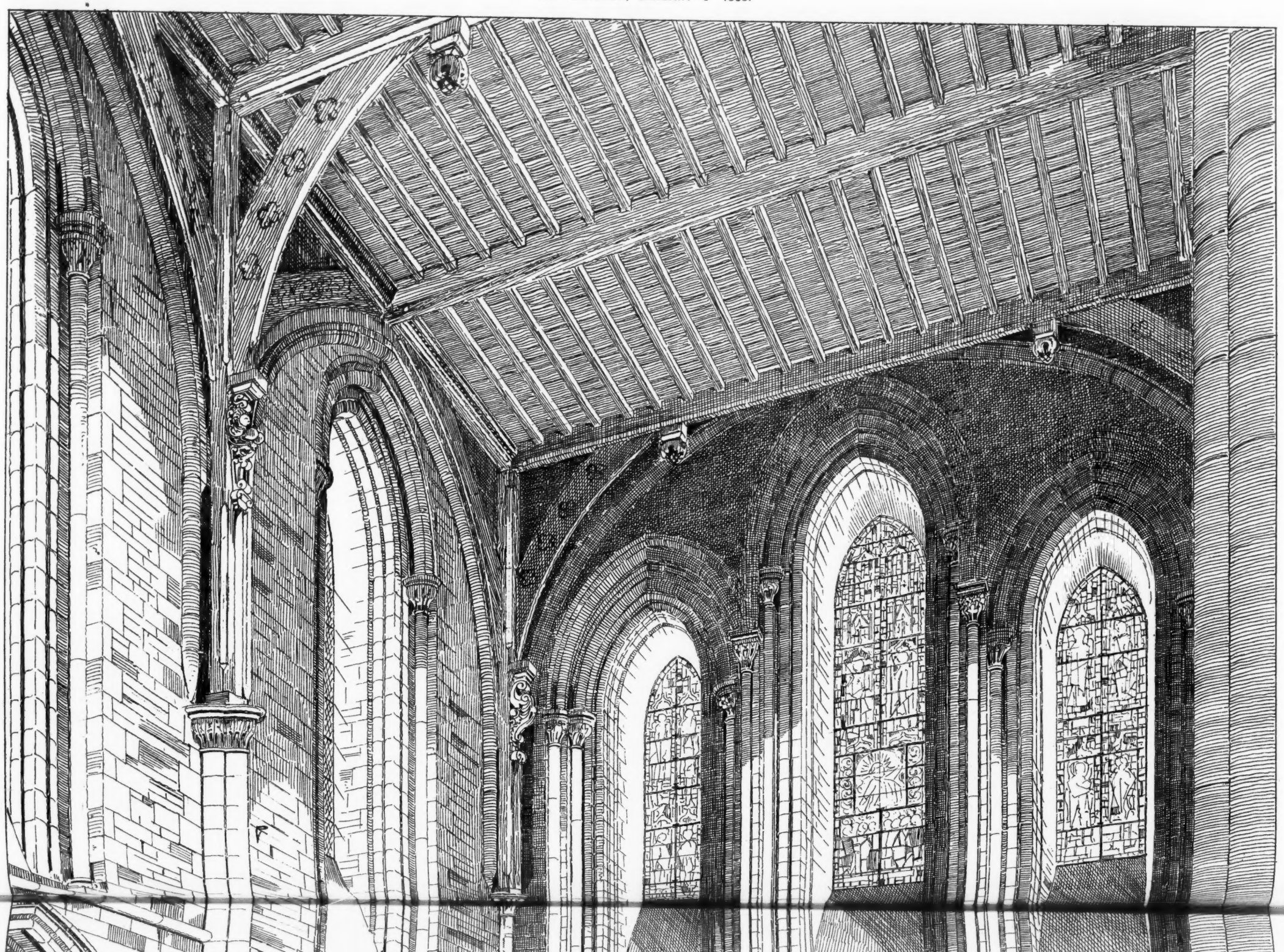

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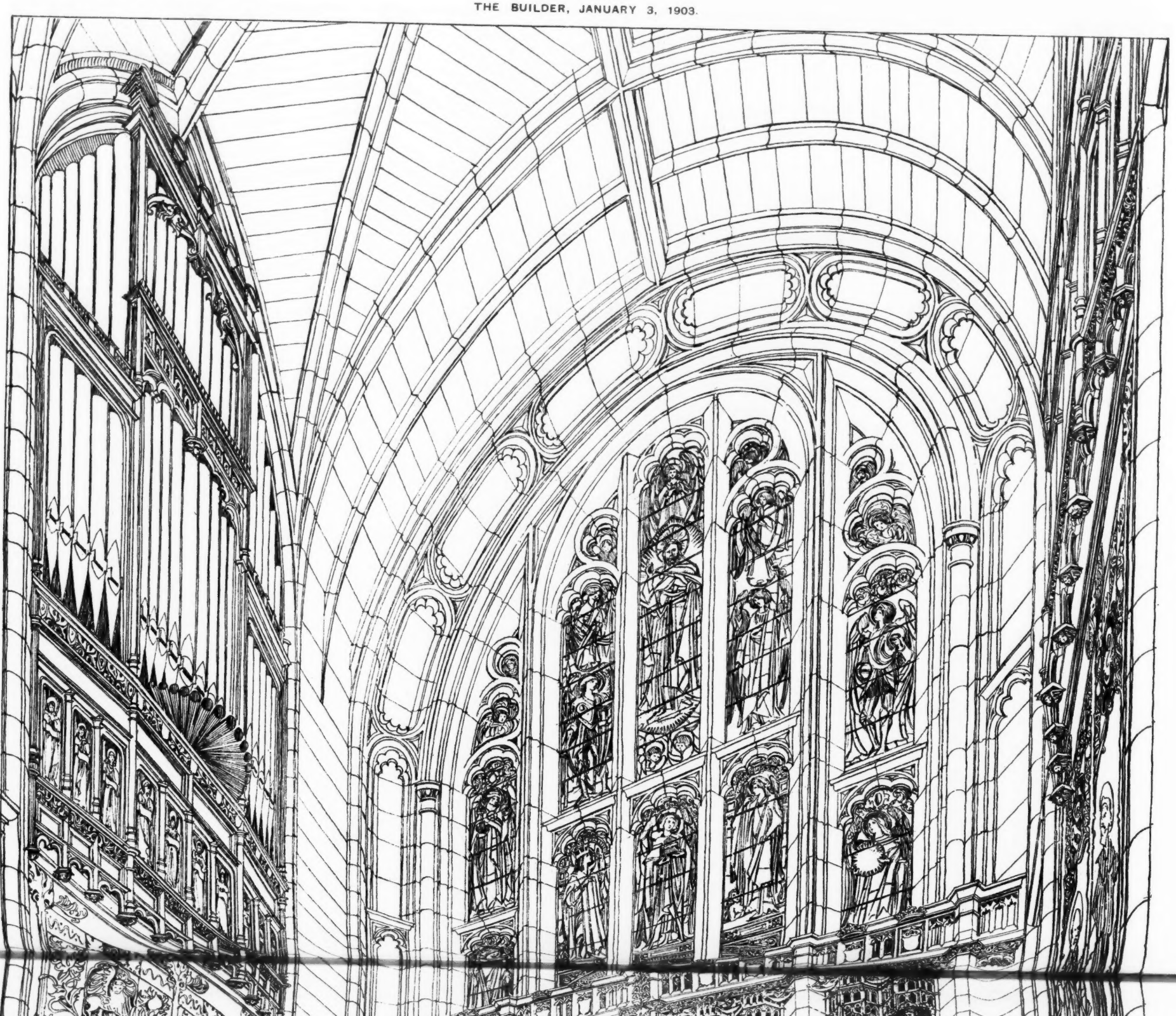

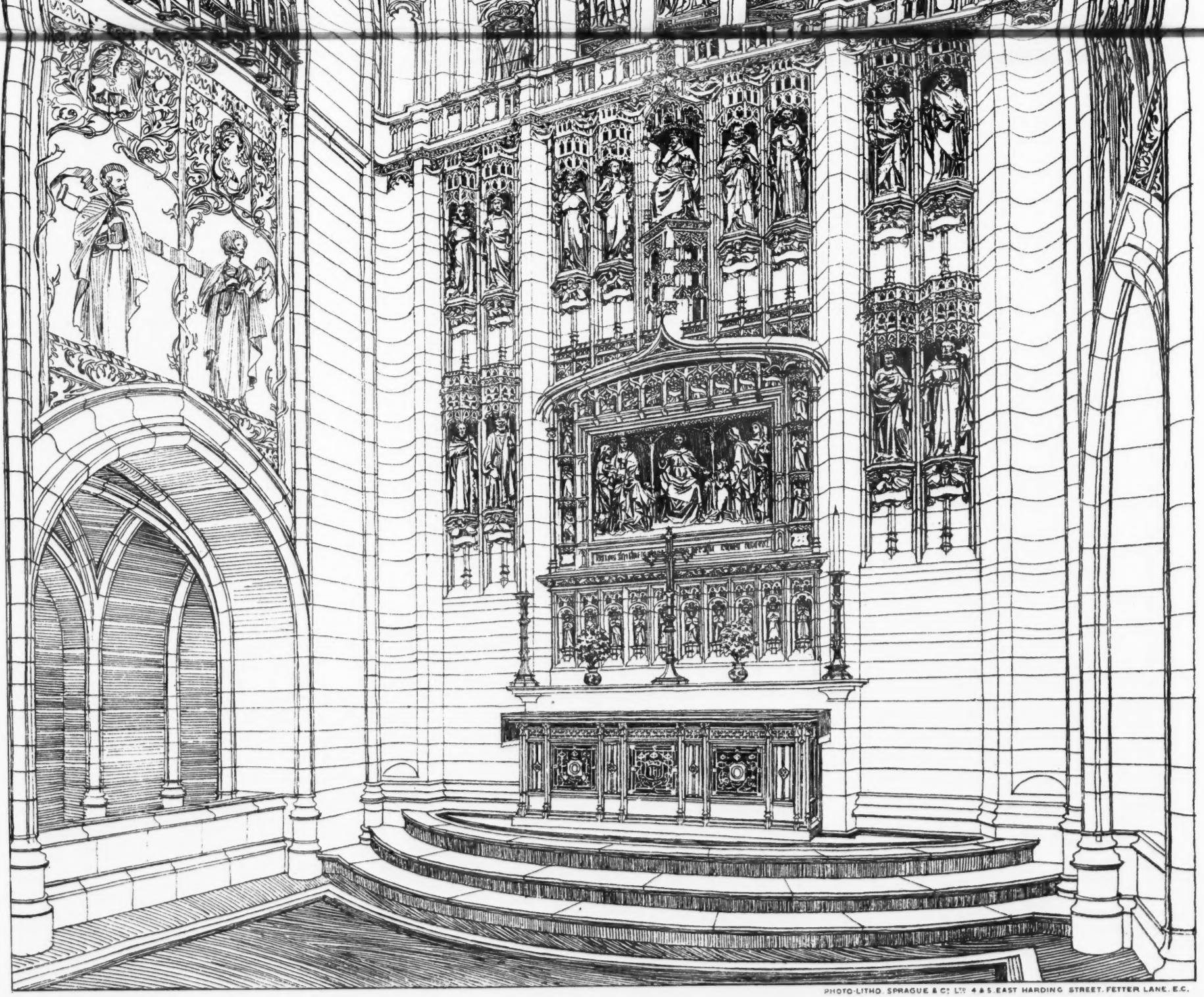

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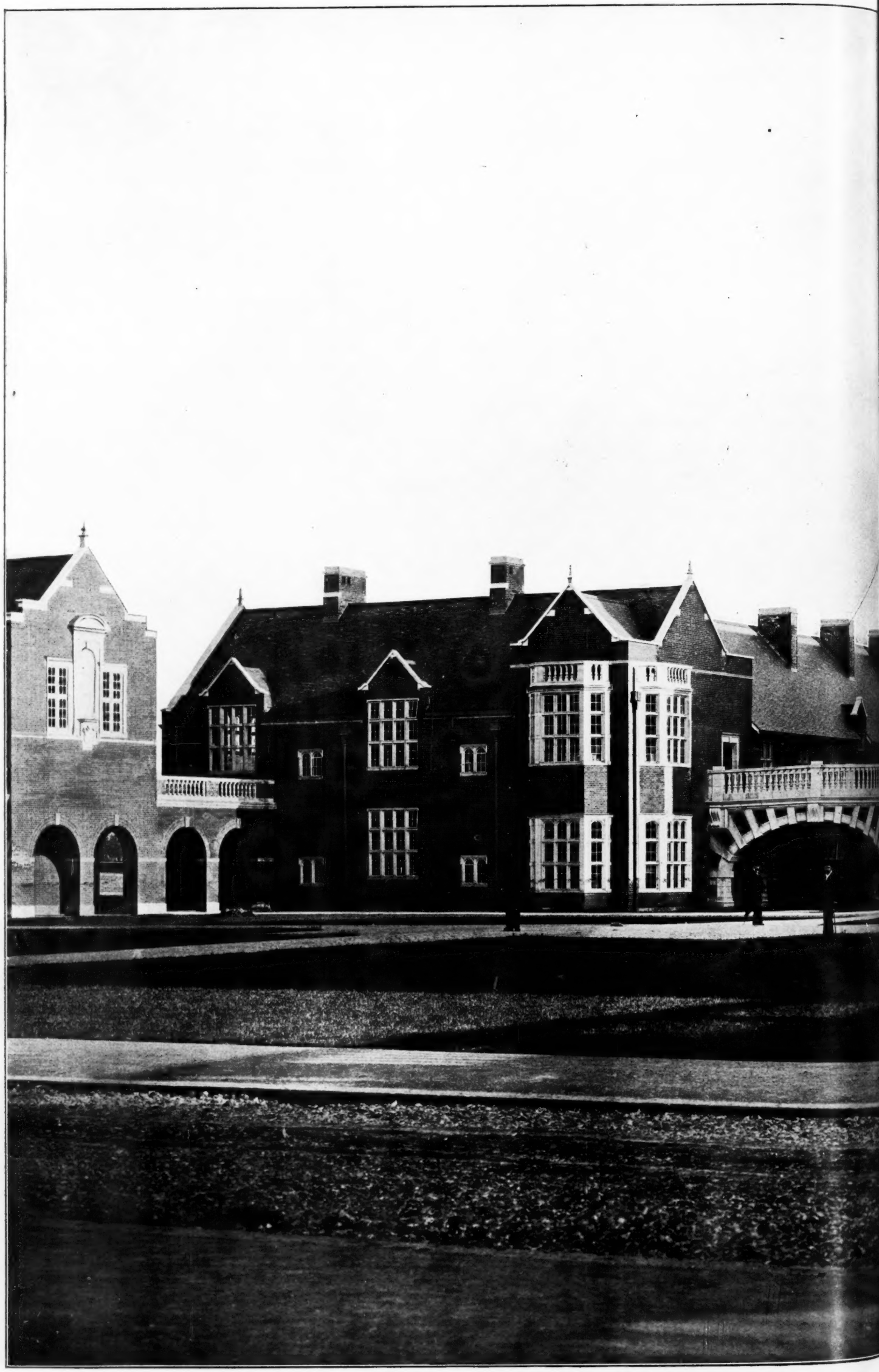

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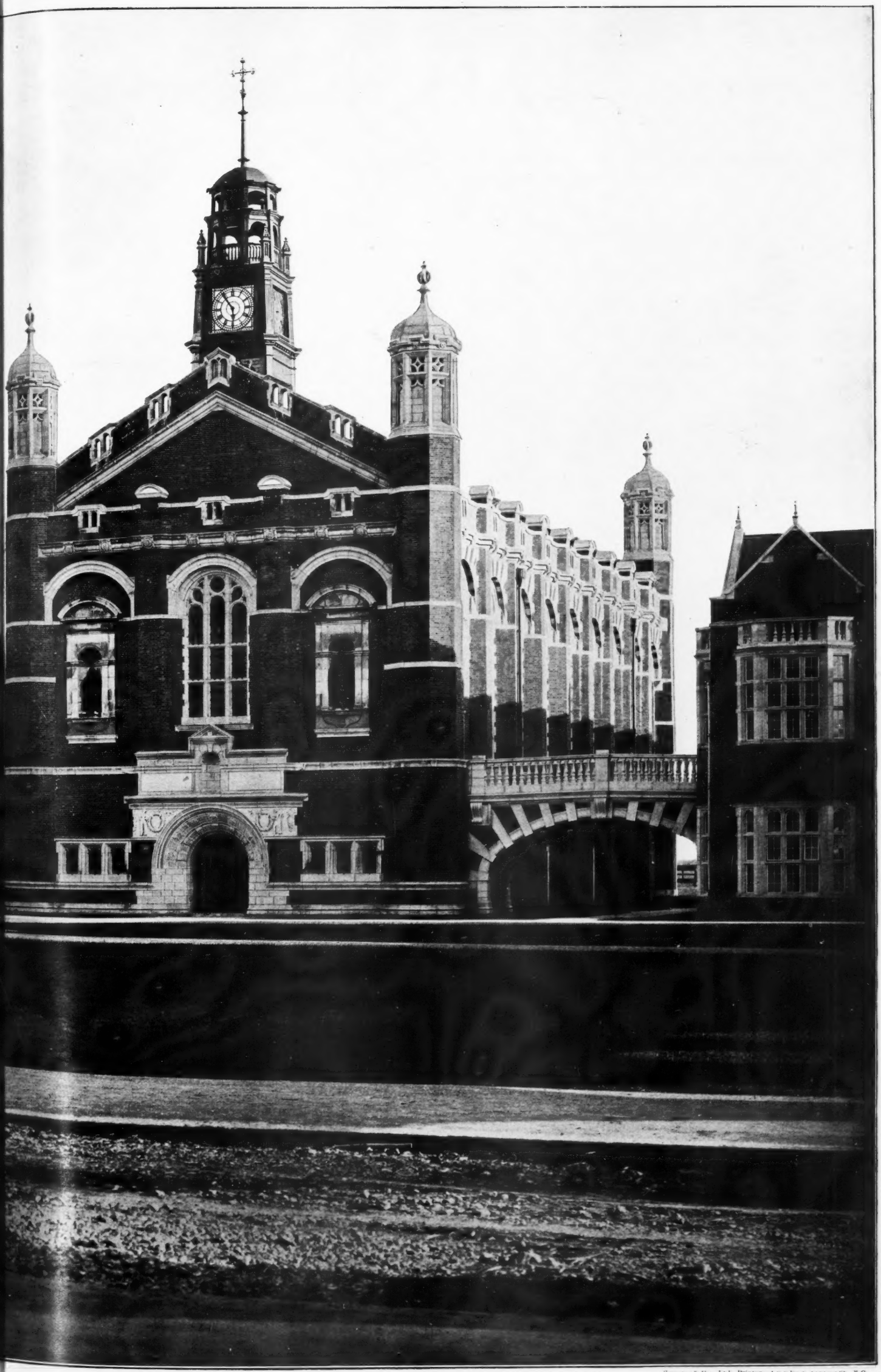

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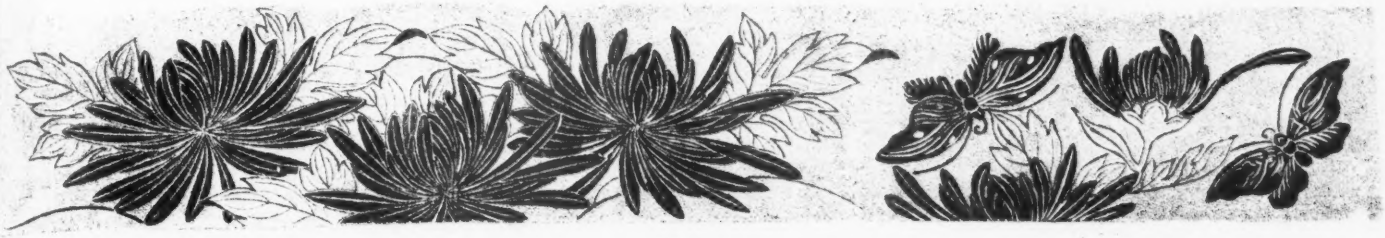

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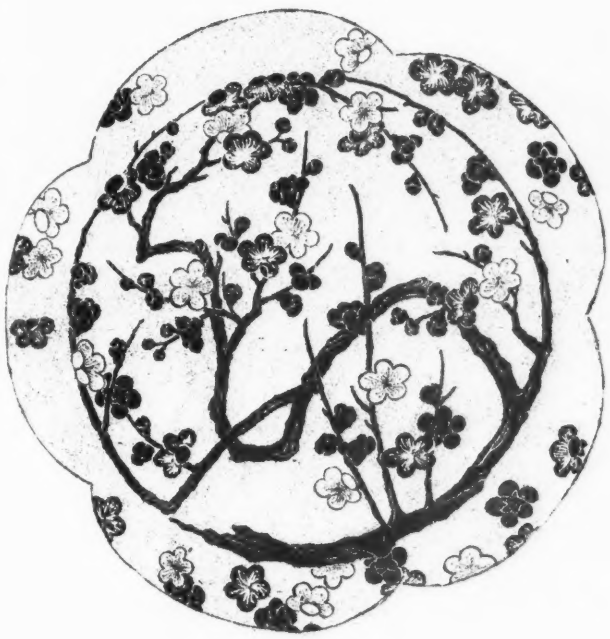

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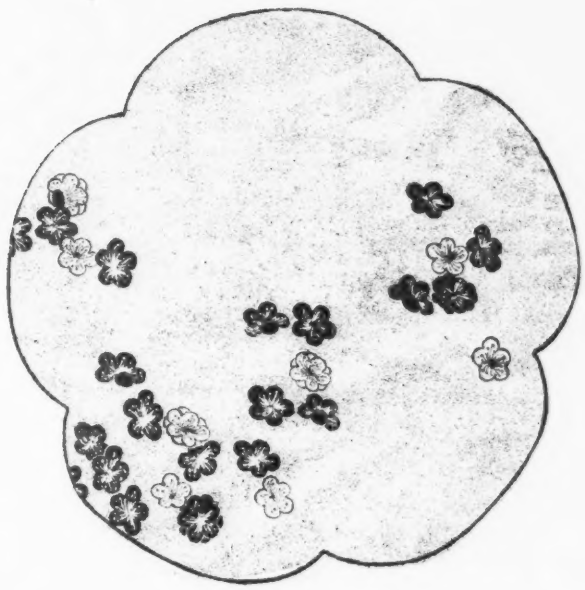

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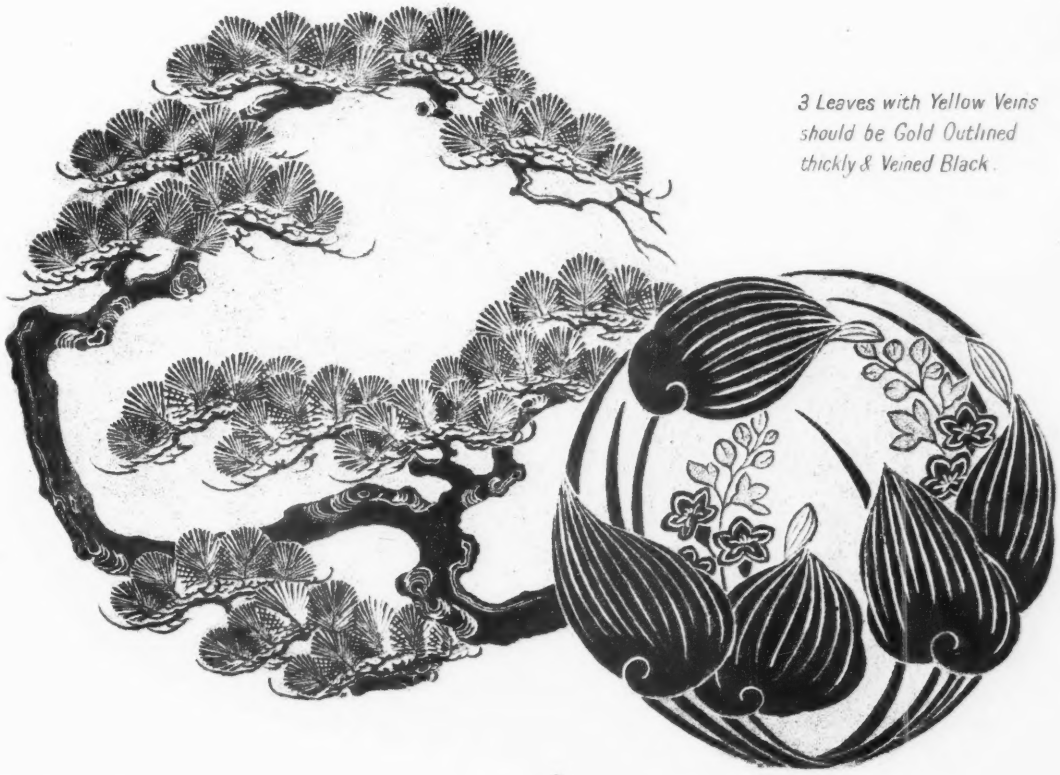

3 Leaves with Yellow Veins should be Gold Outlined thickly & Veined Black.

6.

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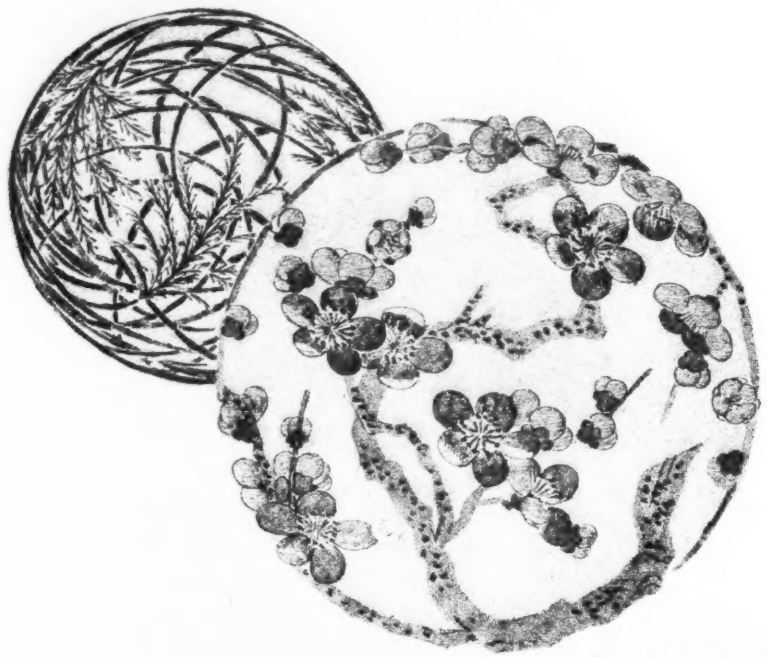
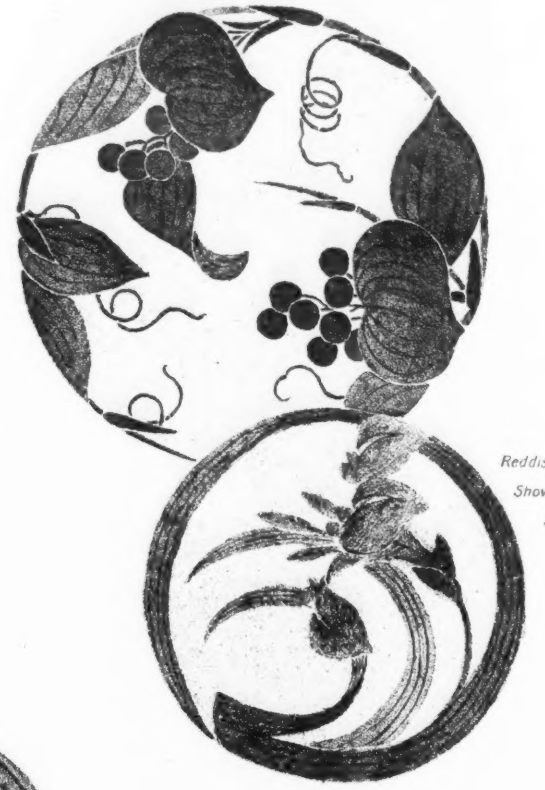


Small Square Patches
of Gold on Stalks.

1.

Grey the same as
Peony.

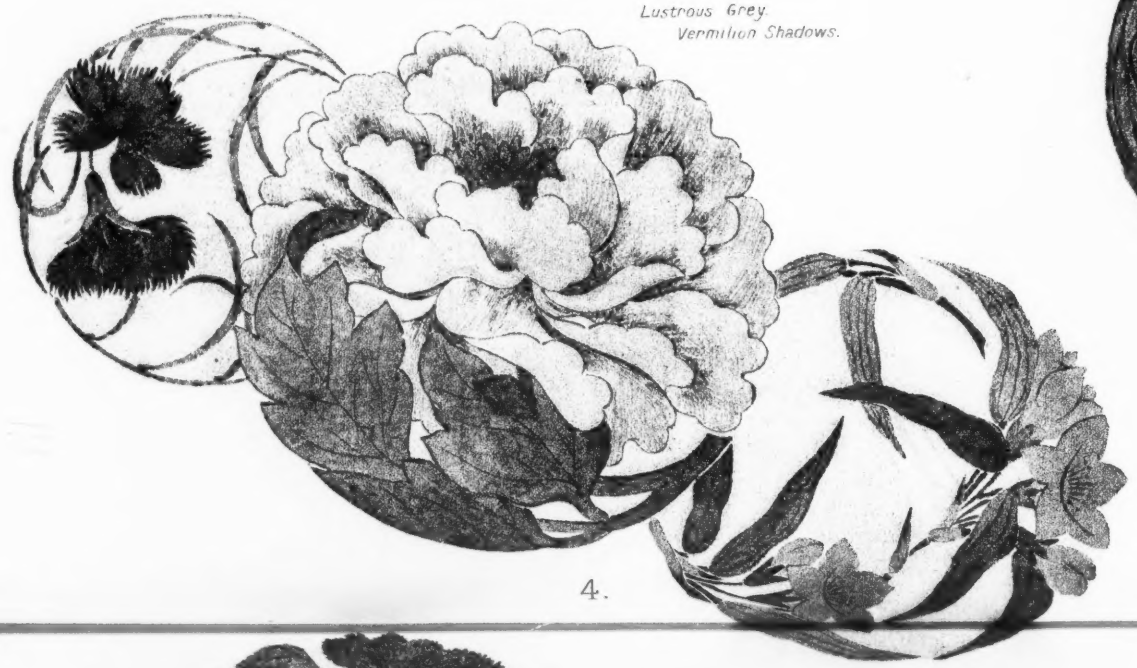
2.



Reddish Brown
Showing Gold
Specks.

3.

Lustrous Grey.
Vermilion Shadows.



4.

5.

6.

4.

6.

7.

8.

9.

10.

11.

Lustrous Blue shaded with Vermilion.

Bud Vermilion shaded slightly with Blue.

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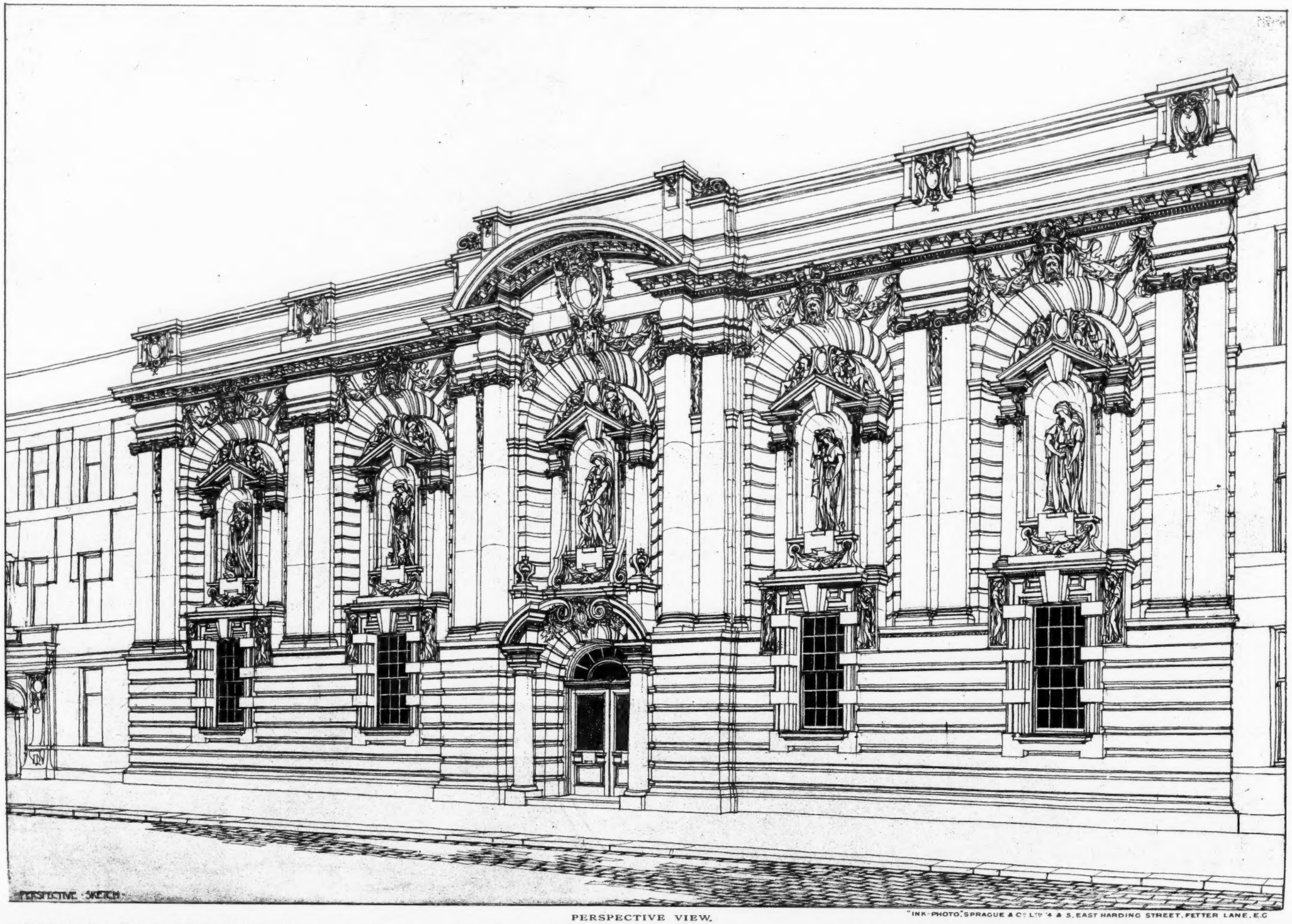
JAPANESE ORNAMENT.—II. TREATMENT OF THE CIRCLE.



PERSPECTIVE VIEW.

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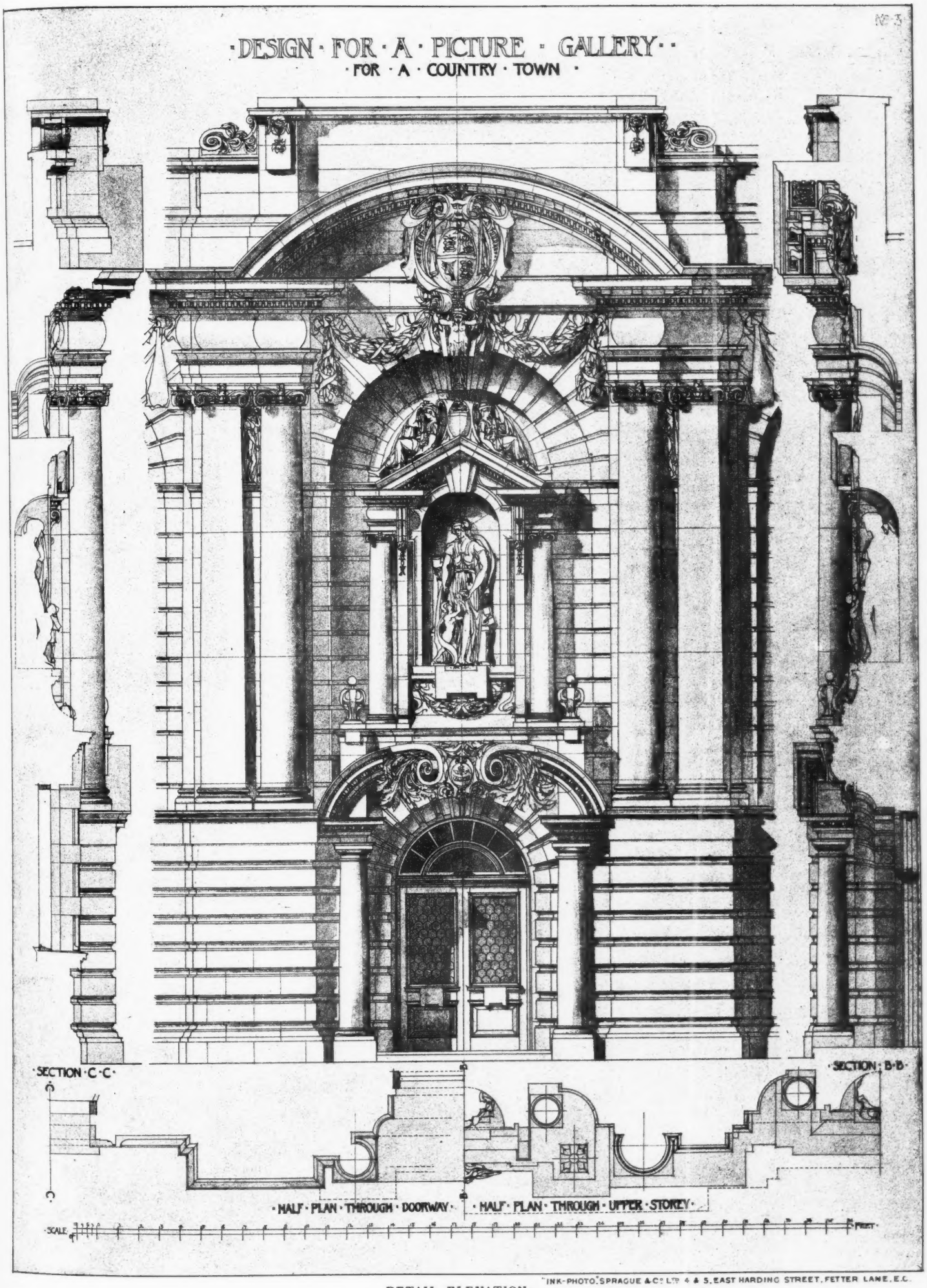
Royal Academy Travelling Studentship, 1902


No 3
DESIGN FOR A PICTURE GALLERY
FOR A COUNTRY TOWN
SECTION C-C
SECTION B-B
HALF PLAN THROUGH DOORWAY
HALF PLAN THROUGH UPPER STOREY
SCALE
FEET
INK-PHOTO SPRAGUE & Co LTD 4 & 5, EAST HARDING STREET, FETTER LANE, E.C.

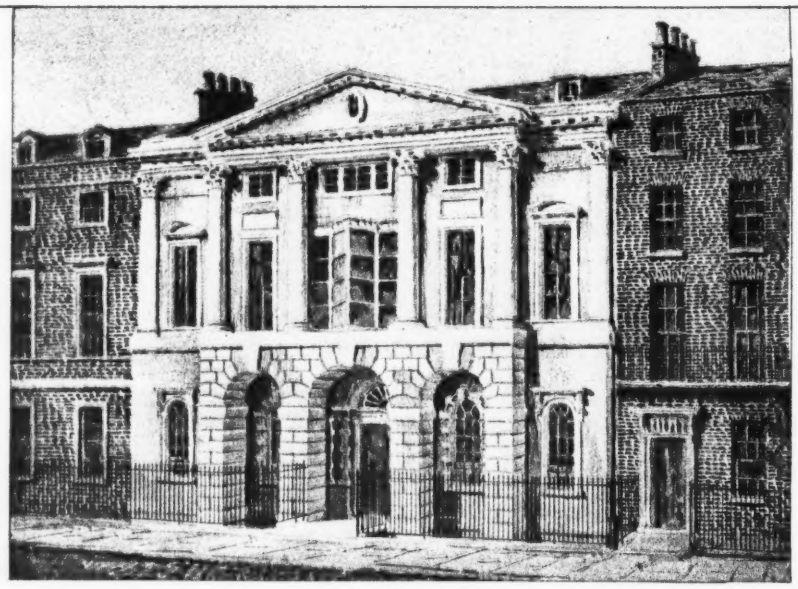
DETAIL ELEVATION.

DESIGN FOR A PICTURE GALLERY FOR A COUNTRY TOWN.—By Mr. J. B. Fulton.

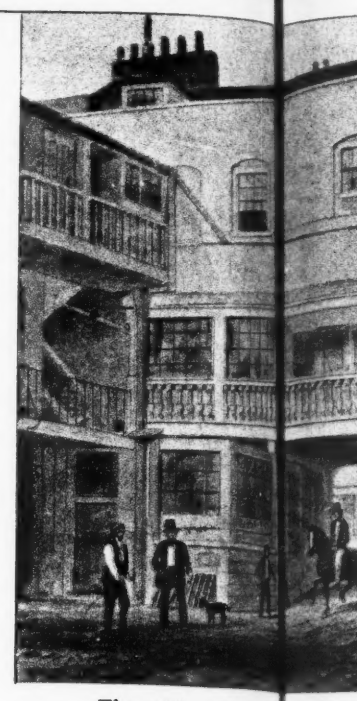
Royal Academy Travelling Studentship, 1902.

PERSPECTIVE VIEW.

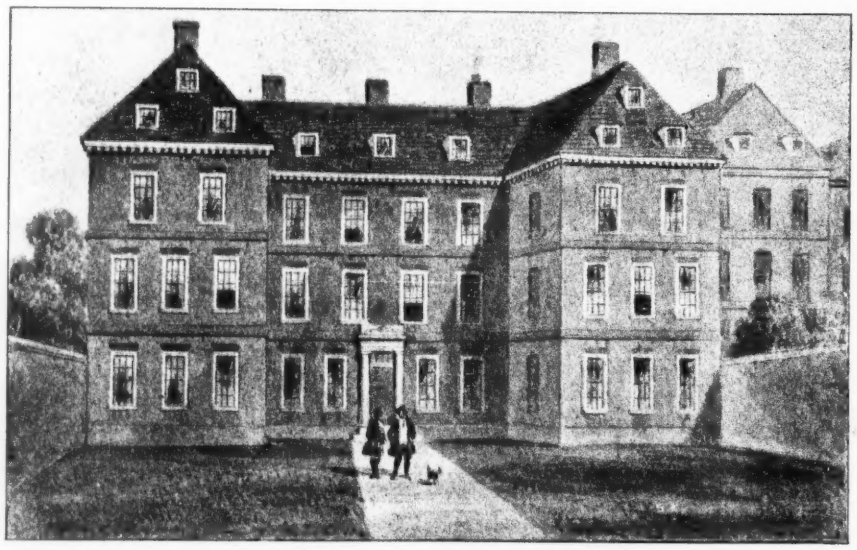
Royal Academy Travelling Studentship, 1902



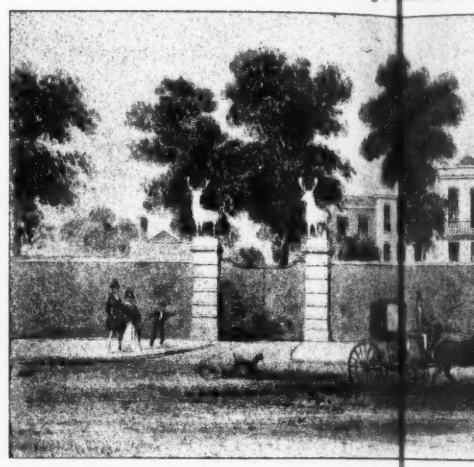
Albemarle House.



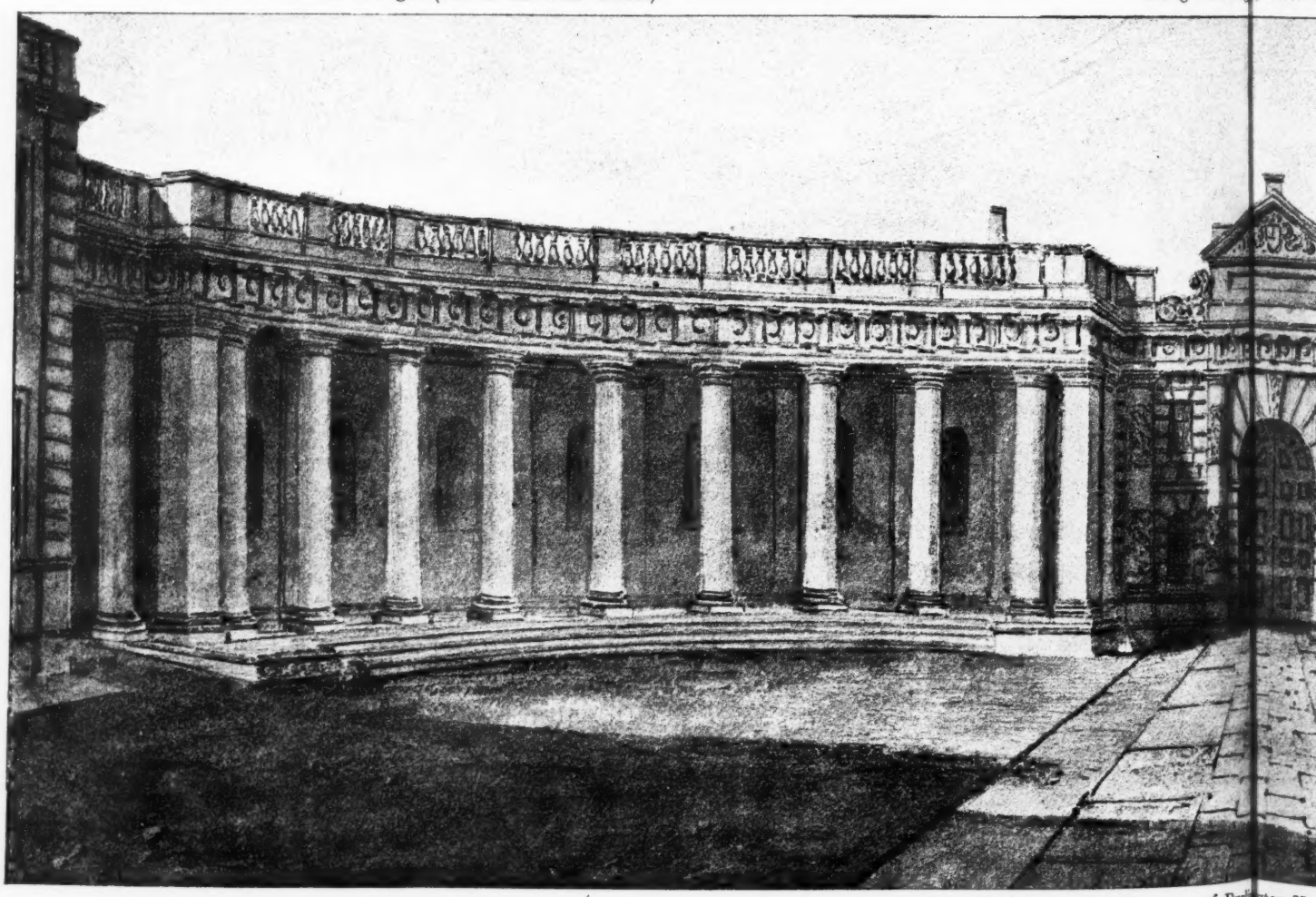
The "Three Kings," near Berk



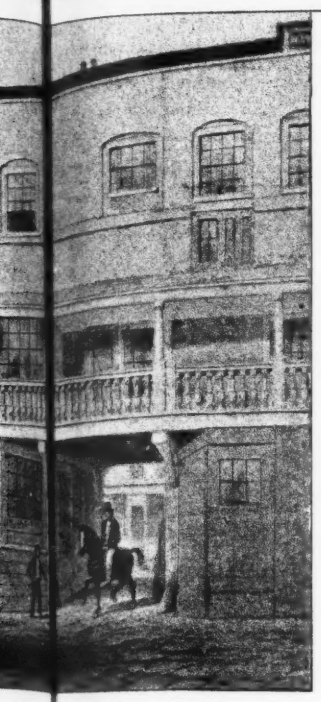
House of Sir Thomas Clarges (site of Sackville Street).



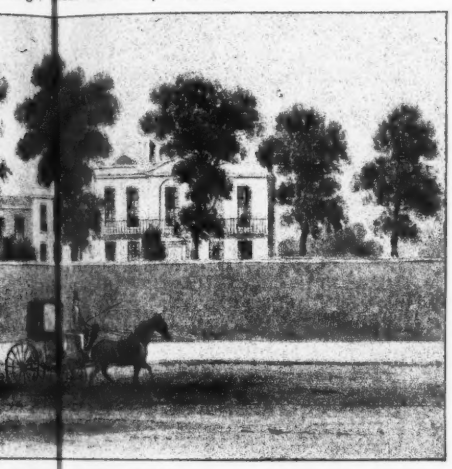
Ranger's Lodge, Green



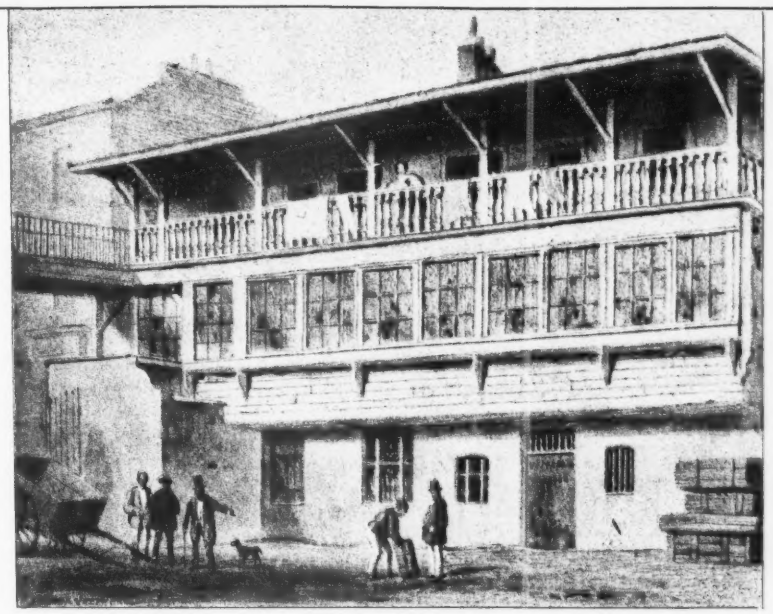
The Colonnade and Gateway of Burlington Ho



Kings," near Berkeley Street.

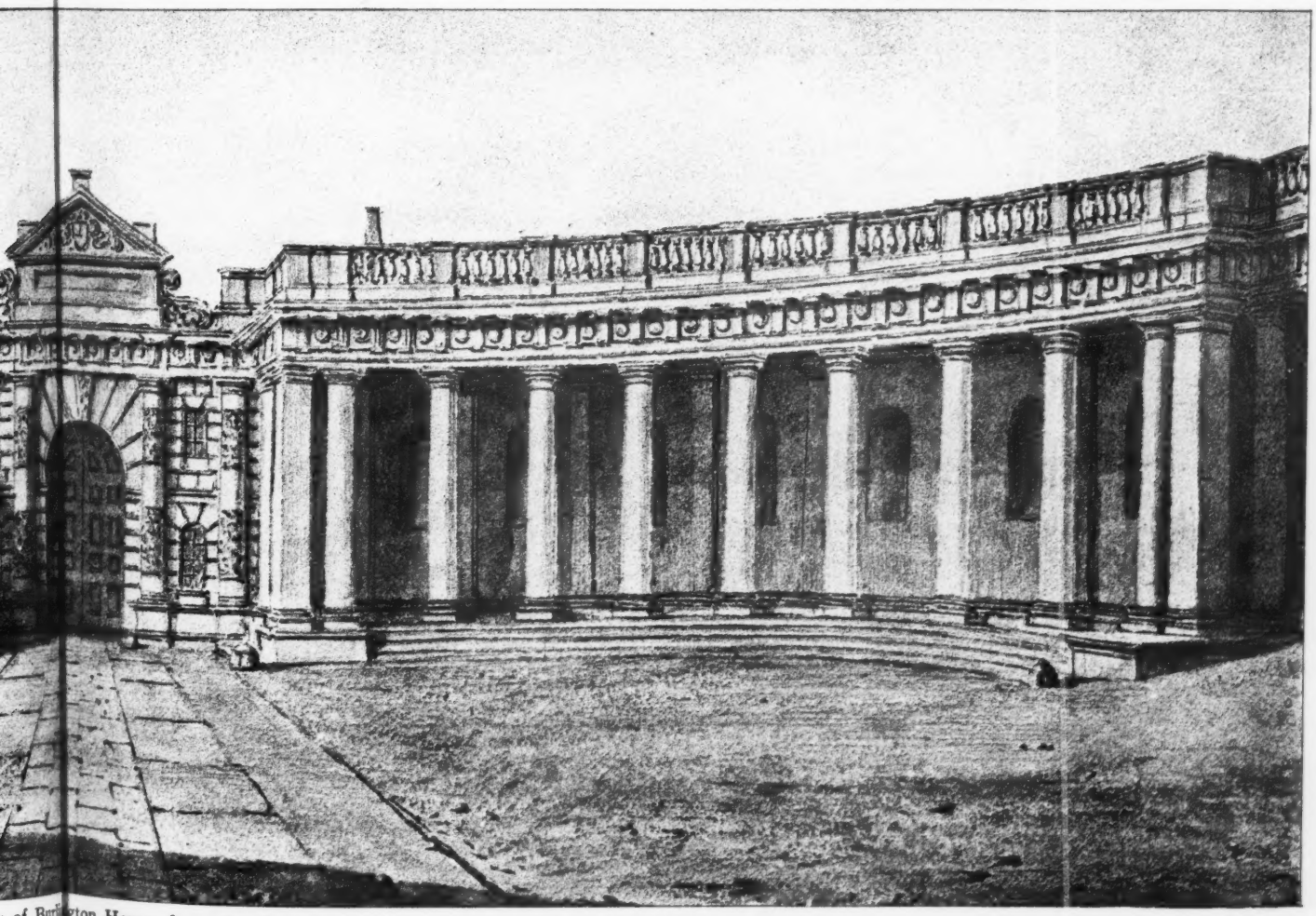


r's Lodge, Green Park.



The "White Bear" (formerly "The Feathers"), Piccadilly.

Old Houses, St. George's Place, Hyde Park Corner.



of Burlington House, from the Courtyard.

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